



Shree Santkrupa College of Pharmacy, Ghogaon

Criterion 7

Institutional Values and Best Practices

7.1

Institutional Values and Social Responsibilities

7.1.2

The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures**
- 2. Management of the various types of degradable and nondegradable waste**
- 3. Water conservation**
- 4. Green campus initiatives**
- 5. Disabled-friendly, barrier free environment**



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
 Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org

**7.1 Institutional Values and Social Responsibilities****7.1.2 The Institution has facilities and initiatives for**

1. Alternate sources of energy and energy conservation measures
2. Management of the various types of degradable and nondegradable waste
3. Water conservation
4. Green campus initiatives
5. Disabled-friendly, barrier free environment

C. Circulars and report of activities for the implementation of the initiatives document**INDEX**

Sr. No.	Content	Page No.
1	Guest lecture on “Environment and Sustainability” 2022-23	2-3
2	Tree Plantation Drive 2022-23	4-6
3	Guest lecture on E-waste management and awareness 2021-22	7-10
4	Village cleaning 2021-22	11-12
5	Cleanliness Drive 2019-20	13-15
6	Masjid Area Cleaning 2019-20	16-17
7	Street Cleaning 2019-20	18-19
8	Tree plantation 2019-20	20-21
9	Swachh Bharat Mission 2018-19	22-24
10	Water Lake Cleaning 2018-19	25-26
11	Water Tank Cleaning 2018-19	27-28
12	Footpath and Street Way Cleaning 2018-19	29-30
13	Tree plantation 2018-19	31-32
14	Certificate of Green Audit	33-35
15	Green Audit Report	36-88
16	Certificate of Energy Audit	89-91
17	Energy Audit Report	92-135

1. Guest lecture on “Environment and Sustainability” 2022-23



Regd. No. MH/4775/Satara
Shree SantkrupaShikshanSanstha's

SHREE SAnTKRUPA COLLEGE OF PHARMACY

GHOGAON (Shivajinagar), Tal :Karad, Dist : Satara, (Maharashtra State) Pin-415111
PH-(02164) 257374, Tel Fax: 257404 Web: www.sscop.org

Mrs. Usha Johari
President

Mr.Prasun Johari
Secretary

Dr.V.R.Aralelimath
Principal

Date: 25/5/2023

NOTICE

All the students, teaching & non-teaching staff members are hereby informed that we are going to organize ``The guest lecture was conducted on the topic “Environment and Sustainability” on 1/6/2023 at ``Shree Santkrupa College of Pharmacy, Ghogaon``.

All are informed to attend the same.

Name of organizing Committee: NSS Unit

Day & Date: 01/06/2023

Time: 11.00 am



Surb
IQAC Co-ordinator
Shree Santkrupa College of Pharmacy, Ghogaon

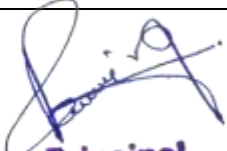


Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACYGhogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 Email : principalsntk@rediffmail.com Web : www.sscop.org**Guest lecture on “Environment and Sustainability” 2022-23**

Academic Year:	
Name of Activity	Guest lecture on “Environment and Sustainability”
Activity Domain	National Service Scheme
Day & Date	01/06/2023
Organized by	NSS Unit (SSCOP, Ghogaon)
Funding Agency	Shivaji University, Kolhapur
Brief Description of Activity	<p>On Thursday, 1st June 2023 a guest lecture was arranged on the occasion of Environment Day. The guest lecture was conducted on the topic “Environment and Sustainability”</p> <p>Mr. Nupoor Erram introduced the speaker and the topic of the lecture to the students. Dr. A. V. Belvotagi and Mr. S. R. Kolekar felicitated the guests. The speaker for the lecture was Mr. Gurav, Head Forest Office, Karad. Mr. Gurav sir initiated his talk by explaining the importance of environment balance. Nowadays because of air, water, sand pollution environment gets spoiled. Sir suggested all to ban the plastic to save the environment. It is collective responsibility to plant a greater number of trees for safety of environment.</p>
Co-ordinator/ In charge	Mr. P.D. Lade
No. of Participants	150

Photos of Activity


Principal
Dr. Ramling G. Patrakar
Shree Santkrupa College of Pharmacy
Ghogaon, Tal. Karad, Dist. Satara

2. Tree Plantation Drive 2022-23



Regd. No. MH/4775/Satara
Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY
GHOGAON (Shivajinagar), Tal : Karad, Dist : Satara, (Maharashtra State) Pin-415111
PH-(02164) 257374, Tel Fax: 257404 Web: www.sscop.org

Dr.Usha A.Johari
President

Mr.Prasun Johari
Secretary

Dr.V.R.Aralelimath
Principal

Date: 30/05/2023

NOTICE

All the teaching & non-teaching staff members are hereby informed that we are going to organize "Tree Plantation on the occasion of the **World Environment Day** on **Thursday, 1st June 2023** at college campus.

All are informed to attend the same.



Sunk
IQAC Co-ordinator
Shree Santkrupa College of Pharmacy, Ghogaon

SRK, Approved by AICTE & PCI, New Delhi, Reco. by Govt. of Maharashtra & affiliated to Shivaji University, Kolhapur



Shree Santkrupa Shikshan Sanstha's
SHREE SANTKRUPA COLLEGE OF PHARMACY

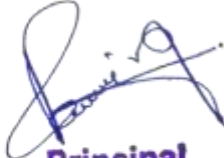
Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
 Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org

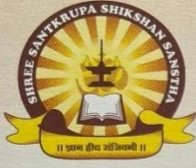


Academic Year: 2022-23	
Name of Activity	Tree Plantation
Activity Domain	Shree Santkrupa College of Pharmacy, Ghogaon
Day & Date	Thursday ,1/6/2023
Organized by	SSCOP, Ghogaon
Funding Agency	Shivaji University, Kolhapur
Brief Description of Activity	On Thursday, 1 st June 2023 on the occasion of Environment Day tree plantation was done in the premises of Shree Santkrupa College of Pharmacy, Ghogaon. The event was begun with the welcoming of Chief guest Mr. S. B. Gurav, Head Forest Office, Karad. First tree plant by Mr. S. B. Gurav sir. Mrs. G. S. Jagtap, head of Pharmaceutical Chemistry Department planted and watered the plants.
Co-ordinator/ In charge	Mrs. G. S. Jagtap
No. of Participants	150

Photos of Activity




Principal
 Dr. Ramling G. Patrakar
 Shree Santkrupa College of Pharmacy
 Ghogaon, Tal. Karad, Dist. Satara



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
 Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Academic Year: 2022-23	
Name of Activity	Tree Plantation
Activity Domain	Shree Santkrupa College of Pharmacy, Ghogaon
Day & Date	Tuesday, 15 th August, 2022
Organized by	SSCOP, Ghogaon
Funding Agency	Shivaji University, Kolhapur
Brief Description of Activity	On the Occasion of Independence Day, Shree Santkrupa College of Pharmacy, Ghogaon, organized the "Tree Plantation Programme" within the campus on 15th August, 2022. Programme was cordially inaugurated by auspicious hand of Hon. Dr. Ashok Johari Hon. President Mrs. Usha Johari, Hon. Secretary Shri. Prasun Johari, and Hon. Treasurer Prajakta Johari. After them Sara Johari, Era Johari and Principals of all departments of Shree Santkrupa College of Pharmacy Ghogaon planted the trees. Teaching, non-teaching and office staff participated in the programme.
No. of Participants	150

Photos of Activity

Principal
 Dr. Ramling G. Patrakar
 Shree Santkrupa College of Pharmacy
 Ghogaon, Tal. Karad, Dist. Satara

3. Guest lecture on E-waste management and awareness 2021-22

Regd. No. MH/4775/Satara DTE Code : 6394, MSBTE Code : 2144

Shree Santkrupa Shikshan Sanstha's
SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org

Dr. Usha A. Johari President
Mr. Prasun Johari Secretary
Dr. V. R. Aralelimath Principal

Date: 06/12/2021

NOTICE

All the students, teaching & non-teaching staff members are hereby informed that we are going to organize **Guest lecture on E-Waste Management and Awareness** on 07/12/2021 at ``Shree Santkrupa college of pharmacy, Ghogaon``.

All are informed to attend the same.

Day & Date: Tuesday 07/12/2021
Time: 10.00

Meade
IQAC Co-ordinator
Shree Santkrupa College of Pharmacy, Ghogaon

Shree Santkrupa College of Pharmacy
Ghogaon

Approved by AICTE, PCI, New Delhi, Reco. by Govt. of Maharashtra & Affiliated to Shivaji University, Kolhapur, MSBTE Mumbai

Regd. No. MH/4775/Satara

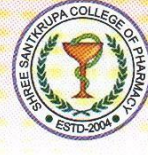
DTE Code : 6394, MSBTE Code : 2144



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Dr. Usha A. Johari
President

Mr. Prasun Johari
Secretary

Dr. V. R. Aralelimath
Principal

Date: 02/12/2021

To,
Mr. S.U. Deshmukh
Assistant Teacher
Shree Santkrupa Institute of Engineering and Technolgy,
Ghogaon

Subject: Invitation for Guest lecture on E-Waste Management and Awareness

Dear Sir,

I am inviting you for Guest lecture on E-Waste Management and Awareness to be held on 7th December, 2021. It will be helpful to all.
Please accept our invitation and do the needful.

Thanking You.

Yours Truly



Meeade
IQAC Co-ordinator
Shree Santkrupa College of Pharmacy, Ghogaon

Approved by AICTE, PCI, New Delhi, Reco. by Govt. of Maharashtra & Affiliated to Shivaji University, Kolhapur, MSBTE Mumbai

Regd. No. MH/4775/Satara

DTE Code : 6394, MSBTE Code : 2144



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY



Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org

Dr. Usha A. Johari
President

Mr. Prasun Johari
Secretary

Dr. V. R. Aralelimath
Principal

Date: 07/12/2021

To,
Mr. S.U. Deshmukh
Assistant Teacher
Shree Santkrupa Institute of Engineering and Technology,
Ghogaon

LETTER OF APPRECIATION

Dear Sir,

On the behalf of Shree Santkrupa College of Pharmacy, Ghogaon we are exceedingly pleased for accepting our invitation for Guest lecture on E-Waste Management and Awareness. We appreciate you for sharing your time, talent, and expertise with us and look forward to working with you in future endeavors.

I sincerely express my deep sense of appreciation for your valuable guidance.

Thanking You.

Yours Truly



Meele
IQAC Co-ordinator
Shree Santkrupa College of Pharmacy, Ghogaon

Approved by AICTE, PCI, New Delhi, Reco. by Govt. of Maharashtra & Affiliated to Shivaji University, Kolhapur, MSBTE Mumbai



Shree Santkrupa Shikshan Sanstha's

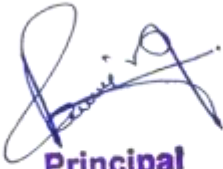
SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
 Ph : (02164) 257374 Email : principalsntk@rediffmail.com Web : www.sscop.org



Academic Year:	
Name of Activity	E-Waste Management and Awareness
Day & Date	Tuesday 07/12/2021
Organized by	Shree Santkrupa College Of Pharmacy
Funding Agency	--
Brief Description of Activity	Shree Santkrupa College of Pharmacy, organized a Guest Lecture on E-Waste Management and Awareness by Mr. Sandip Deshmukh Assistant Teacher, Shree Santkrupa Institute of Engineering and Technology, Ghogaon. Speaker explained various concepts like causes, effects and methods for disposal of electronic waste. He also explained the 3 R's concept – reduce, re-use, re-cycle of E – Waste Management etc. Students took keen interest because of good examples and gained general knowledge information as E-Waste Management is also a kind of Business. 90% E- waste can be recycled. India is 5th largest e waste producer. Overall, it was an good opportunity for students to know more about e-waste management.
Co-ordinator/ In charge	Ms. P. A. Thorat
No. of Participants	100

Photos of Activity


Principal
 Dr. Ramling G. Patrakar
 Shree Santkrupa College of Pharmacy
 Ghogaon, Tal. Karad, Dist. Satara



4. Village cleaning 2021-22

Regd. No. MH/4775/Satara DTE Code : 6394, MSBTE Code : 2144

Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY


Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org


 Dr. Usha A. Johari President	Mr. Prasun Johari Secretary	 Dr. V. R. Aralelimath Principal
---	---------------------------------------	--

Date: 18/03/2022

NOTICE

All the NSS Volunteers are hereby informed that Village cleaning under “Cleanliness Drive” will be organized on Thursday, 22nd March, 2022 at 11.00 am
Attendance is Compulsory.
All should take note of this.


IQAC Co-ordinator
Shree Santkrupa College of Pharmacy, Ghogaon



Approved by AICTE, PCI, New Delhi, Reco. by Govt. of Maharashtra & Affiliated to Shivaji University, Kolhapur, MSBTE Mumbai




Shree Santkrupa Shikshan Sanstha's



SHREE SANTKRUPA COLLEGE OF PHARMACYGhogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org**ACTIVITY REPORT SHEET**

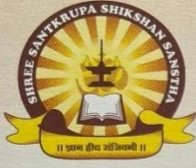
Academic Year: 2021-2022	
Activity Title	Village cleaning
Day & Date	Tuesday 22/03/2022
Organized by	NSS of SSCOP Ghogaon
Collaboration	Shivaji University Kolhapur
Objective	To Clean the village for good health.
Brief Description of Activity	This activity was carried out in Gotewadi village; the students had bought cleaning material from the nearby homes and cleaned the Village. Cleaning activities of these types is a type of help to the community. The students started the activity in the morning later villagers also contributed to the activity.
Co-ordinator	Mr. Lade P D
No. of Participants	40
Outcome	Students should be aware of cleaning not only home but also the Village in which they resides results in contribution to swatch bharat mission.

Photos of Activity


Principal
Dr. Ramling G. Patrakar
Shree Santkrupa College of Pharmacy
Ghogaon, Tal. Karad, Dist. Satara

5. Cleanliness Drive 2019-20

	<p>DTE Code : PH6394</p> <p>Reg.No.MH/4775/Satara F-4746(Satara) Est:22/6/1996 SHREE SANTKRUPA SHIKSHAN SANSTHA'S SHREE SANTKRUPA COLLEGE OF PHARMACY Approved by AICTE, PCI New Delhi, DTE Mumbai & Affiliated to Shivaji University, Kolhapur</p>
<p>PRESIDENT SHRI. SHASHIKANT K. PATIL</p>	<p>SECRETARY MR. PRASUN JOHARI</p>
<p>Date: 30/09/2019</p>	
<p>NOTICE</p>	
<p>All the students are hereby informed that on the occasion of Mahatma Gandhi Jayanti our college is going to organize the swachhta abhiyan on 2nd October.</p>	
<p>All the students should take note of this</p>	
	<p><i>Meedle</i> IQAC Co-ordinator Shree Santkrupa College of Pharmacy, Ghogaon</p>
<p>Ghogaon, Tal.-Karad, Dist.Satara Pin : 415 111 (Maharashtra), Ph: (02164) 257404/257374, Fax : 257404 Website:www.sscop.org Email:-principalsntk@rediffmail.com.</p>	



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACYGhogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org**Cleanliness Drive 2019-20**



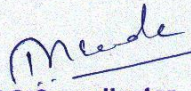
Academic Year:	
Name of Activity	Cleanliness Drive
Activity Domain	National Service Scheme
Day & Date	02/10/2019
Organized by	NSS Unit (SSCOP, Ghogaon)
Funding Agency	Shivaji University, Kolhapur
Brief Description of Activity	Shree Santkrupa College of Pharmacy, Ghogaon has celebrated 2nd October 2019 as birth anniversaries of two freedom fighter's mahatma Gandhiji and Lal Bahadur Shastri. Mr. Lal Bahadur Shastri was ex- prime minister, freedom fighter and railway minister of India. The function was started by Saraswati poojan and deep prajwalan. After that all students listened the bhajan "Raghupati Raghavrajaram Patitpawansitaram". Followed by this, all students have taken Swachh Oath and cleanliness drive was held in the campus. Dr. V. R. Aralelimath gave an inspirable speech to students. He highlighted the importance of cleanliness in society. At afternoon after cleaning all campus all students enjoyed the movie based on Mahatma Gandhi autobiography.
Co-ordinator/ In charge	Mr. P.D. Lade
No. of Participants	240

Photos of Activity



Principal
Dr. Ramling G. Patrakar
Shree Santkrupa College of Pharmacy
Ghogaon, Tal. Karad, Dist. Satara

6. Masjid Area Cleaning 2019-20

	Reg.No. MHI4775/Satara.F-4746(Satara) Est:22/6/1996 SHREE SANTKRUPA SHIKSHAN SANSTHA'S SHREE SANTKRUPA COLLEGE OF PHARMACY Approved by AICTE, PCI New Delhi, DTE Mumbai & Affiliated to Shivaji University, Kolhapur	DTE Code : PH6394
PRESIDENT SHRI. SHASHIKANT K. PATIL		SECRETARY MR. PRASUN JOHARI
Date: 21/02/2020		
NOTICE		
<p>All the NSS Volunteers are hereby informed that Masjid Area Cleaning activity will be organized on Friday, 28th February, 2020 at 11.00 am</p> <p>Attendance is Compulsory.</p> <p>All should take note of this.</p>		
		
 IQAC Co-ordinator Shree Santkrupa College of Pharmacy, Ghogaon		
<p>Ghogaon, Tal.-Karad, Dist.Satara Pin : 415 111 (Maharashtra), Ph. (02164) 257404/257374, Fax : 257404 Website:www.sscop.org Email:-principalsntk@rediffmail.com.</p>		



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111

Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org


**ACTIVITY REPORT SHEET**

Academic Year: 2019-2020	
Activity Title	Masjid Area Cleaning
Day & Date	Friday 28/02/2020
Organized by	NSS of SSCOP Ghogaon
Collaboration	Shivaji University Kolhapur
Objective	To serve the community by performing the activity.
Brief Description of Activity	This activity was carried out in Yelgaonvillage, the students had bought cleaning material from the nearby homes and cleaned the area of masjid. Cleaning activities of these types is a type of help to the community. The students started the activity in the morning later villagers also contributed to the activity.
Co-ordinator	Mr. Lade P D
No. of Participants	40
Outcome	This activity helped the students in gaining knowledge on cleaning and will be part of swatch bharat mission.

Photos of Activity

Principal
Dr. Ramling G. Patrakar
Shree Santkrupa College of Pharmacy
Ghogaon, Tal. Karad, Dist. Satara


7. Street Cleaning 2019-20

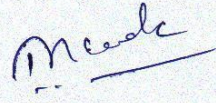
	DTE Code : PH6394
Reg.No.MH/4775/Satara.F-4746(Satara) Est:22/6/1996 SHREE SANTKRUPA SHIKSHAN SANSTHA'S	
SHREE SANTKRUPA COLLEGE OF PHARMACY Approved by AICTE, PCI New Delhi, DTE Mumbai & Affiliated to Shivaji University, Kolhapur	
PRESIDENT SHRI. SHASHIKANT K. PATIL	SECRETARY MR. PRASUN JOHARI

Date: 21/02/2020

NOTICE

All the NSS Volunteers are hereby informed that Street Cleaning will be organized on Friday, 28th February, 2020 at 11.00 am.
Attendance is Compulsory.
All should take note of this.




IQAC Co-ordinator
Shree Santkrupa College of Pharmacy, Ghogaon

Ghogaon, Tal.-Karad, Dist.Satara Pin : 415 111 (Maharashtra), Ph: (02164) 257404/257374, Fax : 257404
Website: www.sscop.org Email:-principalsntk@rediffmail.com.



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY




Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
 Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org

**Academic Year: 2019-2020**

Activity Title	Street Cleaning
Day & Date	Friday 28/02/2020
Organized by	NSS of SSCOP Ghogaon
Collaboration	Shivaji University Kolhapur
Objective	To serve the community by performing the activity.
Brief Description of Activity	This activity was carried out in Yelgaon village; the students had bought cleaning material from the nearby homes and cleaned the streets. Cleaning activities of these types is a type of help to the community. The students started the activity in the morning later villagers also contributed to the activity.
Co-ordinator	Mr. Lade P D
No. of Participants	40
Outcome	This activity helped the students in gaining knowledge on cleaning and will be part of swatch bharat mission.

Photos of Activity

8. Tree plantation 2019-20

	Reg.No.MH/4775/Satara.F-4746(Satara) Est:22/6/1996 SHREE SANTKRUPA SHIKSHAN SANSTHA'S SHREE SANTKRUPA COLLEGE OF PHARMACY Approved by AICTE, PCI New Delhi, DTE Mumbai & Affiliated to Shivaji University, Kolhapur	DTE Code : PH6394
PRESIDENT SHRI. SHASHIKANT K. PATIL		SECRETARY MR. PRASUN JOHARI
Date: 21/02/2020		
NOTICE		
<p>All the NSS Volunteers are hereby informed that Tree plantation activity will be organized on Tuesday, 25th February, 2020 at 11.00 am</p> <p>Attendance is Compulsory.</p> <p>All should take note of this.</p>		
		
 IQAC Co-ordinator Shree Santkrupa College of Pharmacy, Ghogaon		
<small>Ghogaon, Tal.-Karad, Dist.Satara Pin : 415 111 (Maharashtra), Ph: (02164) 257404/257374, Fax : 257404 Website:www.sscop.org Email:-principalsntk@rediffmail.com.</small>		



Shree Santkrupa Shikshan Sanstha's


SHREE SANTKRUPA COLLEGE OF PHARMACYGhogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org**ACTIVITY REPORT SHEET**

Academic Year: 2019-2020	
Activity Title	Tree plantation
Day & Date	Tuesday 25/02/2020
Organized by	NSS of SSCOP Ghogaon
Collaboration	Shivaji University Kolhapur
Objective	To serve the community by performing the activity.
Brief Description of Activity	This activity was carried out in Yelgaon village; the students had arranged a Tree plantation in the village. Many people supported this activity because trees gives oxygen to the surroundings and helps in global warming.
Co-ordinator	Mr. Lade P D
No. of Participants	40
Outcome	This activity helped the students in gaining knowledge on importance of tree plantation and enviourment.

Photos of Activity
Principal

Dr. Ramling G. Patrakar
Shree Santkrupa College of Pharmacy Page 21 of 135
Ghogaon, Tal. Karad, Dist. Satara

9 Swachh Bharat Mission 2018-19



DTE Code : PH6394

Reg.No.MH/4775/Satara.F-4746(Satara) Est:22/6/1996
SHREE SANTKRUPA SHIKSHAN SANSTHA'S
SHREE SANTKRUPA COLLEGE OF PHARMACY
Approved by AICTE, PCI New Delhi, DTE Mumbai & Affiliated to Shivaji University, Kolhapur

PRESIDENT
SHRI. SHASHIKANT K. PATIL


SECRETARY
MR. PRASUN JOHARI

Date: 01/10/2018

NOTICE

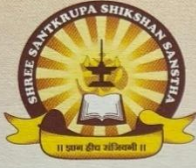
All the students are hereby informed that "SWACHH BHARAT MISSION RALLY" will be organized on Tuesday, 02nd October, 2018 at 11:00 am. Attendance is Compulsory.

All should take note of this.



M. Meade
IQAC Co-ordinator
Shree Santkrupa College of Pharmacy, Ghogaon

Ghogaon, Tal.-Karad, Dist.Satara Pin : 415 111 (Maharashtra), Ph: (02164) 257404/257374, Fax : 257404
Website:www.sscop.org Email:-principalsntk@rediffmail.com.



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
 Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



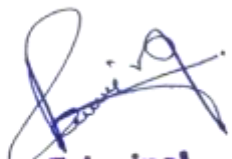
Swachh Bharat Mission 2018-19

Academic Year:	
Name of Activity	Swachh Bharat Mission
Activity Domain	National Service Scheme
Day & Date	Tuesday 02/10/2018
Organized by	NSS Unit (SSCOP, Ghogaon)
Funding Agency	--
Brief Description of Activity	Swachh Bharat Mission runs by Govt. of India from 2nd Oct.2014 to2019. In this regard Shree Santkrupa College of Pharmacy, Ghogaon on 2nd Oct.2018 carried out the swachhataoath taking ceremony and cleaning of the premises.Principal, Dr. V.R. Aralelimath also highlighted the vision of honorable Prime Minister of India about swachha Bharat Mission. He also explained about Mahatma Gandhijis dream of a clean India. Our beloved Principal, Dr. V.R. Aralelimath took the lead of the cleanliness drive, the college building including laboratories, classrooms, Admin area and other areas are cleaned.Outside the building the whole campus was also cleaned, good number of students, around 250 participated in the cleanliness drive and enjoyed the cleanliness process whole heartedly.
Co-ordinator/ In charge	Mr. P.D. Lade
No. of Participants	250



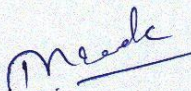
Photos of Activity






Principal
Dr. Ramling G. Patrakar
Shree Santkrupa College of Pharmacy
Ghogaon, Tal. Karad, Dist. Satara

10 Water Lake Cleaning 2018-19

	<p>Reg.No.MH/4775/Satara.F-4746(Satara) Est:22/6/1996 SHREE SANTKRUPA SHIKSHAN SANSTHA'S SHREE SANTKRUPA COLLEGE OF PHARMACY Approved by AICTE, PCI New Delhi, DTE Mumbai & Affiliated to Shivaji University, Kolhapur</p>	<p>DTE Code : PH6394</p>
<p>PRESIDENT SHRI. SHASHIKANT K. PATIL</p>	<p>SECRETARY MR. PRASUN JOHARI</p>	
<p>Date: 09/02/2019</p>		
<p>NOTICE</p>		
<p>All the NSS Volunteers are hereby informed that Water Lake Cleaning activity will be organized on Tuesday, 12th February, 2019 at 11:00 am. Attendance is Compulsory. All should take note of this.</p>		
	<p> IQAC Co-ordinator Shree Santkrupa College of Pharmacy, Ghogaon</p>	
<p>Ghogaon, Tal.-Karad, Dist.Satara Pin : 415 111 (Maharashtra), Ph: (02164) 257404/257374, Fax : 257404 Website:www.sscop.org Email:-principalsntk@rediffmail.com.</p>		



Shree Santkrupa Shikshan Sanstha's



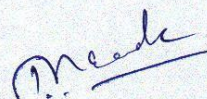
SHREE SANTKRUPA COLLEGE OF PHARMACYGhogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org

Academic Year: 2018-2019	
Activity Title	Water Lake Cleaning
Day & Date	Tuesday 12/02/2019
Organized by	NSS of SSCOP Ghogaon
Collaboration	Shivaji University Kolhapur
Objective	To serve the community in terms health by the activity.
Brief Description of Activity	This activity was carried out in Ghogaon village; the students had bought cleaning material from the nearby homes and cleaned the water lake. Cleaning activities of these types is a type of help to the community. The students started the activity in the morning later villagers also contributed to the activity.
Co-ordinator	Mr. Lade P D
No. of Participants	40
Outcome	Students should be aware of cleaning water lakes main source of water supply, which will provide fresh water to city and in turn community will be able to restore health.

Photos of Activity

Principal
Dr. Ramling G. Patrakar
Shree Santkrupa College of Pharmacy
Ghogaon, Tal. Karad, Dist. Satara

11 Water Tank Cleaning 2018-19

	<p>Reg.No.MH/4775/Satara.F-4746(Satara) Est:22/6/1996 SHREE SANTKRUPA SHIKSHAN SANSTHA'S SHREE SANTKRUPA COLLEGE OF PHARMACY Approved by AICTE, PCI New Delhi, DTE Mumbai & Affiliated to Shivaji University, Kolhapur</p>	<p>DTE Code : PH6394</p>
<p>PRESIDENT SHRI. SHASHIKANT K. PATIL</p>	<p>SECRETARY MR. PRASUN JOHARI</p>	
<p>Date: 09/02/2019</p>		
<p>NOTICE</p>		
<p>All the NSS Volunteers are hereby informed that Water Tank Cleaning activity will be organized on Thursday, 14th February, 2019 at 11:00 am.</p>		
<p>Attendance is Compulsory.</p>		
<p>All should take note of this.</p>		
	<p> IQAC Co-ordinator Shree Santkrupa College of Pharmacy, Ghogaon</p>	
<p>Ghogaon, Tal.-Karad, Dist.Satara Pin : 415 111 (Maharashtra), Ph: (02164) 257404/257374, Fax : 257404 Website:www.sscop.org Email:-principalsntk@rediffmail.com.</p>		



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
 Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org

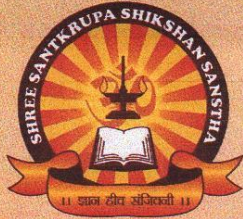

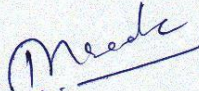
**Academic Year: 2018-2019**

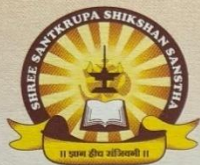
Activity Title	Water Tank Cleaning
Day & Date	Thursday 14/02/2019
Organized by	NSS of SSCOP Ghogaon
Collaboration	Shivaji University Kolhapur
Objective	To serve the community in terms health by the activity.
Brief Description of Activity	This activity was carried out in Ghogaon village; the students had bought cleaning material from the nearby homes and cleaned the Water tank. Cleaning activities of these types is a type of help to the community. The students started the activity in the morning later villagers also contributed to the activity.
Co-ordinator	Mr. Lade P D
No. of Participants	40
Outcome	Students should be aware of cleaning water tanks which will provide fresh water to city and in turn community will be able to restore health.

Photos of Activity
Principal

Dr. Ramling G. Patrakar
 Shree Santkrupa College of Pharmacy
 Ghogaon, Tal. Karad, Dist. Satara

12 Footpath and Street Way Cleaning 2018-19

	<p>Reg.No.MH/4775/Satara.F-4746(Satara) Est:22/6/1996 SHREE SANTKRUPA SHIKSHAN SANSTHA'S SHREE SANTKRUPA COLLEGE OF PHARMACY Approved by AICTE, PCI New Delhi, DTE Mumbai & Affiliated to Shivaji University, Kolhapur</p>	<p>DTE Code : PH6394</p>
<p>PRESIDENT SHRI. SHASHIKANT K. PATIL</p>	<p>SECRETARY MR. PRASUN JOHARI</p>	
<p>Date: 09/02/2019</p>		
<p>NOTICE</p>		
<p>All the NSS Volunteers are hereby informed that Footpath and Street Way Cleaning will be organized on Wednesday, 13th February, 2019 at 11:00 am.</p>		
<p>Attendance is Compulsory.</p>		
<p>All should take note of this.</p>		
	<p> IQAC Co-ordinator Shree Santkrupa College of Pharmacy, Ghogaon</p>	
<p>Ghogaon, Tal.-Karad, Dist.Satara Pin : 415 111 (Maharashtra), Ph: (02164) 257404/257374, Fax : 257404 Website:www.sscop.org Email:-principalsntk@rediffmail.com.</p>		



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111

Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Academic Year: 2018-2019	
Activity Title	Footpath And Street Way Cleaning.
Day & Date	Wednesday 13/02/2019
Organized by	NSS of SSCOP Ghogaon
Collaboration	Shivaji University Kolhapur
Objective	To make students aware about purpose of cleaning
Brief Description of Activity	This activity was carried out in Ghogaon village; the students had bought cleaning material from the nearby homes and cleaned the street and footpath. Cleaning activities of these types is a type of help to the community. The students started the activity in the morning later villagers also contributed to the activity.
Co-ordinator	Mr. Lade P D
No. of Participants	40
Outcome	Students should be aware of cleaning not only home but also the city in which they resides results in contribution to swatch bharat mission.

Photos of Activity

Principal

Dr. Ramling G. Patrakar
Shree Santkrupa College of Pharmacy
Ghogaon, Tal. Karad, Dist. Satara

13 Tree plantation 2018-19



Dr.Usha A.Johari
President

Regd. No. MH/4775/Satara
Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

GHOGAON (Shivajinagar), Tal : Karad, Dist : Satara, (Maharashtra State) Pin-415111
PH-(02164) 257374, Tel Fax: 257404 Web: www.sscop.org

Mr.Prasun Johari
Secretary

Dr.V.R.Aralelimath
Principal

Date: 02/07/2018

NOTICE

All the teaching & non-teaching staff members are hereby informed that we are going to organize "Tree Plantation on the occasion of the **World Environment Day on Thursday, 05-07-2018** at college campus.

All are informed to attend the same.


IQAC Co-ordinator
Shree Santkrupa College of Pharmacy, Ghogaon



SRK, Approved by AICTE & PCI, New Delhi, Reco. by Govt. of Maharashtra & affiliated to Shivaji University, Kolhapur



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACYGhogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 Email : principalsntk@rediffmail.com Web : www.sscop.org

Academic Year: 2018-19	
Name of Activity	Tree Plantation
Activity Domain	Shree Santkrupa College of Pharmacy, Ghogaon
Day & Date	Thursday, 05-07-2018
Organized by	SSCOP, Ghogaon
Funding Agency	Shivaji University, Kolhapur
Brief Description of Activity	On the occasion of the World Environment Day , our college has organized an extensive Tree Plantation Programme in campus. In order to restore the eco-balance with protection from pollution and global warming, this programme was organized with a lot of sincerity, seriousness and love. Non-teaching staff members selected the empty places to plant saplings in a well-organized way. Dr. J. S. Mulla, head of Pharmaceutics Department planted saplings, fenced them and watered the plants. Teaching & non-teaching staff members also planted saplings in campus. The saplings were brought from nursery in karad region. The programme created a great stir among the staff members. It was decided to take care of saplings and trees available in surrounding
No. of Participants	-

Photos of Activity

Principal
Dr. Ramling G. Patrakar
Shree Santkrupa College of Pharmacy
Ghogaon, Tal. Karad, Dist. Satara



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 Email : principalsntk@rediffmail.com Web : www.sscop.org



Certificate of Green Audit 2022-23

Green Audit Report: Shree Santkrupa College of Pharmacy, Ghogaon: 2022-23

ENGRESS SERVICES

Yashashree, 26, Nirmal Bag Society, Near Muktangan English School,
Parvati, Pune 411 009 Tel: 09890444795 Email: engress123@gmail.com
MEDA Registration No: ECN/2022-23/CR-43/1709
ISO: 9001-2015 Certified (Cert No: 23EQKC13),
ISO: 14001-2015 Certified (Cert No: 23EEKW20)

GREEN AUDIT CERTIFICATE

Certificate No: ES/SCP/22-23/02

Date: 07/11/2023

This is to certify that we have conducted Green Audit at Shree Santkrupa College of Pharmacy, Ghogaon, in the Year 2022-23.

The Institute has adopted following Energy Efficient & Green Practices:

- Usage of Energy Efficient LED Light Fitting
- Installation of 25 Kw Capacity Solar Power Plant
- Segregation of Waste at Source
- Installation of Bio Composting Pit
- College has installed septic tanks and it cleans periodically
- Installation of Rain Water Harvesting Project
- Maintenance of good Internal Road
- Tree Plantation in the campus
- Provision of Ramp for Divyangajan
- Creation of awareness by display of Posters on Resource Conservation

We appreciate the support of Management, involvement of faculty members and students in the process of Energy Conservation & making the campus Green.

For Engress Services,



A Y Mehendale,
B E- Mech, M Tech-Energy, Certified Energy Auditor, EA-8192
ASSOCHAM GEM Certified Professional: GEM: 22/788



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 Email : principalsntk@rediffmail.com Web : www.sscop.org



Certificate of Green Audit 2021-22

Green Audit Report: Shree Santkrupa College of Pharmacy, Ghogaon: 21-22

ENGRESS SERVICES

Yashashree, 26, Nirmal Bag Society,
Near Muktangan English School, Parvati, Pune 411 009
Tel: 09890444795 Email: engress123@gmail.com

Ref: ES/SCP/21-22/02

Date: 22/05/2022

CERTIFICATE

This is to certify that we have conducted Green Audit at Shree Santkrupa College of Pharmacy, Ghogaon in the Academic year 2021-22.

The College has adopted following Green Initiatives:

- Usage of Energy Efficient LED Light Fitting
- Maximum Usage of Day Lighting
- Provision of Separate bins for Dry & Wet Waste
- The College has installed Septic Tank and is cleaned periodically.
- Implementation of Rain Water Management Project
- Maintenance of good Internal Road
- Tree Plantation in the campus
- Creation of awareness by Display of Posters on Resource Conservation

We appreciate the support of Management, involvement of faculty members and students in the process of Energy Conservation & making the campus Green.

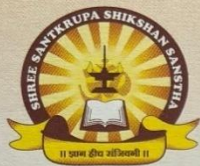
For Engress Services,



A Y Mehendale,
Certified Energy Auditor, EA-8192
ASSOCHAM GEM Certified Professional: GEM: 22/788

Regd. No. MH/4775/Satara

DTE Code : 6394, MSBTE Code : 2144



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 Email : principalsntk@rediffmail.com Web : www.sscop.org



Certificate of Green Audit 2020-21

Green Audit Report: Shree Santkrupa College of Pharmacy, Ghogaon: 20-21

Enrich Consultants

Yashashree, 26, Nirmal Bag Society,
Near Muktangang English School, Parvati, Pune 411 009
Tel: 09890444795 Email: enrichcons@gmail.com

Ref: EC/SCP/20-21/02

Date: 26/05/2021

CERTIFICATE

This is to certify that we have conducted Green Audit at Shree Santkrupa College of Pharmacy, Ghogaon in the Academic year 2020-21.

The College has adopted following Green Initiatives:

- Usage of Energy Efficient LED Light Fitting
- Maximum Usage of Day Lighting
- Provision of Separate bins for Dry & Wet Waste
- The College has installed Septic Tank and is cleaned periodically.
- Implementation of Rain Water Management Project
- Maintenance of good Internal Road
- Tree Plantation in the Campus
- Creation of awareness by Display of Posters on Resource Conservation

We appreciate the support of Management, involvement of faculty members and students in the process of Energy Conservation & making the campus Green.

For Enrich Consultants,



A Y Mehendale,
Certified Energy Auditor
EA-8192

Enrich Consultants, Pune

Page 3

Regd. No. MH/4775/Satara

DTE Code : 6394, MSBTE Code : 2144



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Green Audit Report

Green/Environmental Audit Report

2022-23

GREEN AUDIT REPORT

of

Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY,

Ghogaon (Shivajinagar) Dist. Satara (M.H.) – 415 111



Year: 2022-23

Prepared by:

ENGRESS SERVICES

Yashashree, 26, Nirmal Bag Society
Near Muktangan English School, Parvati, Pune 411009
Phone: 09890444795 Email: engress123@gmail.com

ENGRESS SERVICES

Yashashree, 26, Nirmal Bag Society, Near Muktangan English School,
Parvati, Pune 411 009 Tel: 09890444795 Email: engress123@gmail.com
MEDA Registration No: ECN/2022-23/CR-43/1709
ISO: 9001-2015 Certified (Cert No: 23EQKC13),
ISO: 14001-2015 Certified (Cert No: 23EEKW20)

GREEN AUDIT CERTIFICATE

Certificate No: ES/SCP/22-23/02

Date: 07/11/2023

This is to certify that we have conducted Green Audit at Shree Santkrupa College of Pharmacy, Ghogaon, in the Year 2022-23.

The Institute has adopted following Energy Efficient & Green Practices:

- Usage of Energy Efficient LED Light Fitting
- Installation of 25 Kw Capacity Solar Power Plant
- Segregation of Waste at Source
- Installation of Bio Composting Pit
- College has installed septic tanks and it cleans periodically
- Installation of Rain Water Harvesting Project
- Maintenance of good Internal Road
- Tree Plantation in the campus
- Provision of Ramp for Divyangajan
- Creation of awareness by display of Posters on Resource Conservation

We appreciate the support of Management, involvement of faculty members and students in the process of Energy Conservation & making the campus Green.

For Engress Services,



A Y Mehendale,
B E- Mech, M Tech-Energy, Certified Energy Auditor, EA-8192
ASSOCHAM GEM Certified Professional: GEM: 22/788

REGISTRATION CERTIFICATES



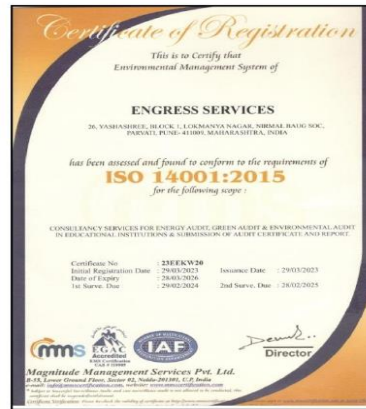
MEDA Registration Certificate



GEM Certified Professional Certificate



ISO: 9001-2015 Certificate



ISO: 14001-2015 Certificate

INDEX

Sr. No	Particulars	Page No
I	Acknowledgement	5
II	Executive Summary	6
III	Abbreviations	8
1	Introduction	9
2	Study of Energy Consumption & CO ₂ Emission	10
3	Study of Usage of Renewable Energy	12
4	Study of Waste Management	13
5	Study of Rain Water Management	15
6	Study of Green & Sustainable Practices	16
	Annexure	
I	List of Trees & Plants	18

ACKNOWLEDGEMENT

We Engress Services, Pune, express our sincere gratitude to the management of Shree Santkrupa College of Pharmacy, Ghogaon for awarding us the assignment of Green Audit of their Campus for the Year: 2022-23.

We are thankful to all the staff members for helping us during the field study.

EXECUTIVE SUMMARY

1. **Shree Santkrupa College of Pharmacy, Ghogaon** consumes Energy in the form of **Electrical Energy**; used for various Electrical Equipment, office & other facilities.

2. Present Energy Consumption & CO₂ Emission:

No	Particulars	Value	Unit
1	Annual Energy Consumption	18593	kWh
2	Annual CO ₂ Emissions	17.13	MT

3. Renewable Energy & Energy Efficiency Projects:

- Usage of Energy Efficient LED Fittings
- Maximum usage of Day Lighting
- Installation of 25 Kw Capacity Solar Power Plant

4. Waste Management:

5.1 Segregation of Waste at Source:

The Waste is segregated at source in separate Waste Bins & is handed over for further action.

5.2 Bio Composting Pit:

The Institute has a Bio Composting Pit, to convert the Leafy Waste into Bio Compost.

5.3 Liquid Waste Management:

The Institute has installed Septic Tank and it cleans periodically.

5.4 Sanitary Waste Management:

The Institute has not installed Sanitary Waste Incinerator, It is recommended to install Sanitary Waste Incinerator for disposal of the Sanitary Waste.

5.5 E-Waste Management:

It is recommended to dispose of the E Waste through Authorized Agency.

6. Rain Water Management:

The Institute has installed the Rainwater Management project; the rain water falling on the terrace is collected through pipes and is used for recharging the land water table.

7. Green & Sustainable Practices:

- Maintenance of good Internal Road
- Provision of Ramp for Divyangajan
- Creation of awareness on Resource Conservation Display of Posters

8. Assumption:

1. 1 kWh of Electrical Energy releases **0.9 Kg of CO₂** into atmosphere

9. Reference:

- For CO₂ Emissions: www.tatapower.com

ABBREVIATIONS

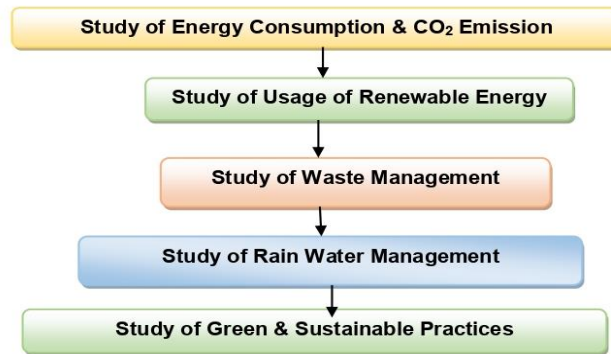
BEE	Bureau of Energy Efficiency
kWh	Kilo Watt Hour
LPD	Liters Per Day
Kg	Kilo Gram
MT	Metric Ton
CO ₂	Carbon Di Oxide
Qty	Quantity

CHAPTER-I INTRODUCTION

1.1 Introduction:

A Green Audit is conducted at Shree Santkrupa College of Pharmacy, Ghogaon.

1.2 Audit Procedural Steps:



1.3 Institute Location Image:



CHAPTER-II STUDY OF ENERGY CONSUMPTION & CO₂ EMISSION

A **Carbon Foot print** is defined as the Total Greenhouse Gas emissions, emitted due to various activities. In this we compute the emissions of Carbon-Di-Oxide, by usage of the various forms of Energy used by the Institute for performing its day to day activities

The Institute uses Electrical Energy for various Electrical gadgets.

Basis for computation of CO₂ Emissions:

The basis of Calculation for CO₂ emissions due to Electrical Energy is as under

- 1 kWh of Electrical Energy releases 0.9 Kg of CO₂ into atmosphere

Based on the above Data we compute the CO₂ emissions which are being released in to the atmosphere by the Institute due to its Day to Day operations

Table No1: Month wise CO₂ Emissions:

No	Month	Energy Consumed, kWh	CO ₂ Emissions, MT
1	Apr-22	1143	1.06
2	May-22	1356	1.25
3	Jun-22	1440	1.33
4	Jul-22	1560	1.44
5	Aug-22	1725	1.58
6	Sep-22	1668	1.54
7	Oct-22	1710	1.58
8	Nov-22	1653	1.52
9	Dec-22	1473	1.36
10	Jan-23	1650	1.52
11	Feb-23	1563	1.44
12	Mar-23	1652	1.52
13	Total	18593	17.13
14	Maximum	1725	1.58
15	Minimum	1143	1.06
16	Average	1549.41	1.43

Chart No 1: Month wise CO₂ Emissions:

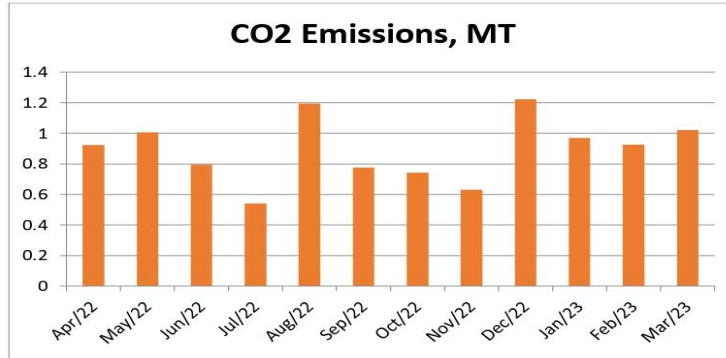


Table No2: Important Parameters:

No	Parameter/ Value	Energy Consumed, kWh	CO ₂ Emissions, MT
1	Total	18593	17.13
2	Maximum	1725	1.58
3	Minimum	1143	1.06
4	Average	1549.41	1.43

CHAPTER III STUDY OF USAGE OF RENEWABLE ENERGY

The Institute has installed a **25 kWp** capacity Roof top Solar PV Plant this year.
Now we compute the Percentage of Alternate Energy to Annual Energy demand:

Table No 7: Computation of % Annual Energy Demand met by Alternate Energy:

No	Particulars	Value	Unit
1	Energy Purchased from MSEDCL	18593	kWh
2	Installed Roof Top Solar PV Plant Capacity	25	kWp
3	Average Daily Energy Generated	4	kWh/kWp
4	Annual Generation Days	300	Nos
5	Annual Solar Energy Generated	30000	kWh
6	Total Energy Demand = (1) + (5)	35887	kWh
7	Expecting % of Usage of Alternate Energy to Total Annual Energy Demand for Current Year Consumption= (5)*100/ (6)	61	%

Photograph of Roof Top Solar PV Plant:



CHAPTER IV STUDY OF WASTE MANAGEMENT

4.1 Segregation of Waste at Source:

The Waste is segregated at source in separate Waste Bins & is handed over for further action.

Photograph of Waste Collection Bins:



4.2 Bio Composting Pit:

The Institute has a Bio Composting Pit, to convert the Leafy Waste into Bio Compost.

Photograph of Bio Composting Pit:



4.3 Liquid Waste Management:

The Institute has installed Septic Tanks it cleans periodically.

4.4 Sanitary Waste Management:

The Institute has not install Sanitary Waste Incinerator, It is recommended to install Sanitary Waste Incinerator for disposal of the Sanitary Waste.

4.5 E Waste Management:

It is recommended to dispose of the E Waste through Authorized Agency.

CHAPTER V STUDY OF RAIN WATER MANAGEMENT

The Institute has implemented the Rain Water Management Project. The Institute has installed Pipes from the terrace and the Rain water falling on the terrace is gathered and is used for recharging the land water table and gardening purpose.

Photograph of Rain Water Management & Pipe Section:



CHAPTER VI STUDY OF GREEN & SUSTAINABLE PRACTICES

6.1 Internal Pedestrian:

The College has well maintained internal Pedestrian to facilitate the easy movement of the students within the campus.

Photograph of Internal Pedestrian:



6.2 Internal Tree Plantation:

The College has well maintained landscaped garden in the campus.

Photograph of Tree plantation:



6.3 Provision of Ramp for Divyangajan:

For easy movement of Divyangajan, the Institute has made provision of Ramp.

Photograph of Ramp:



6.3 Creation of Awareness about Energy Conservation:

The Institute has displayed posters emphasizing on importance of Energy Conservation.

Photograph of Poster on Energy Conservation:



ANNEXURE-I

LIST OF TREES & PLANTS IN THE CAMPUS

Presently the College Campus has more than 100 trees:

No	Name of Trees
1	Azadirachta Indica (Neem)
2	Cestrum nocturnum (Ratrani)
3	Tectona Grandis (Sagwan)
4	Thuja (Vidya)
5	Delonix Regia (Gulmohar)
6	Millettia pinnata (Karanj)
7	Lawsonia inermis (Mehendi)
8	Saraca asoca (Ashoka)
9	Alstonia scholaris (Saptpami)
10	Palm Tree



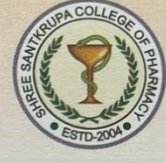
Regd. No. MH/4775/Satara

DTE Code : 6394, MSBTE Code : 2144



Shree Santkrupa Shikshan Sanstha's
SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Green/Environmental Audit Report

2021-22

GREEN AUDIT REPORT

of

Shree Santkrupa Shikshan Sanstha's
SHREE SANTKRUPA COLLEGE OF PHARMACY,
Ghogaon (Shivajinagar)
Dist. Satara (M.H.) – 415 111

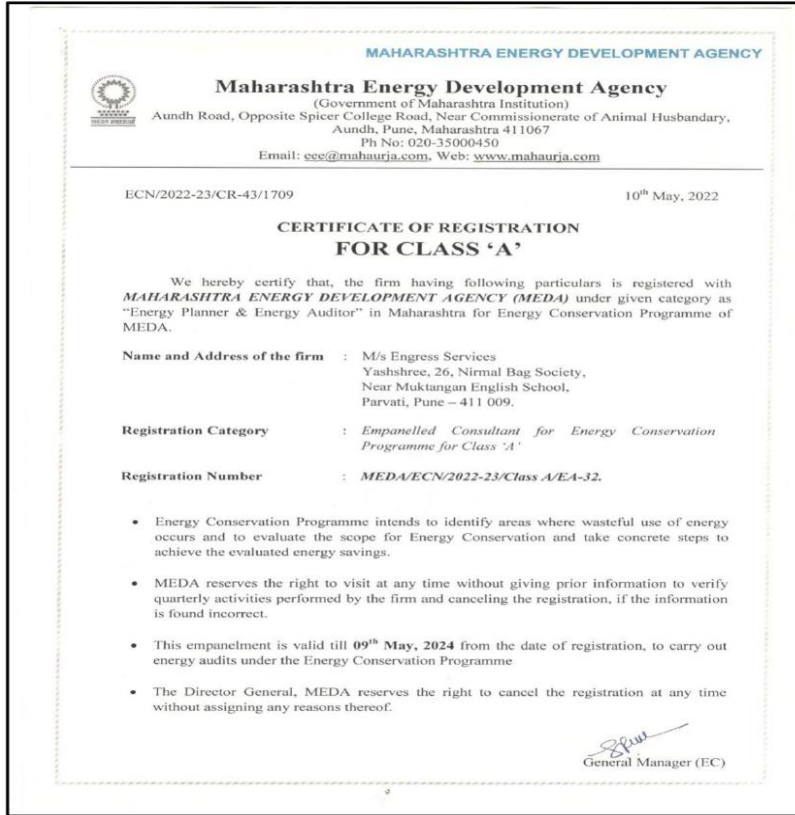


Year: 2021-22

Prepared by:

Engress Services

Yashashree, 26, Nirmal Bag Society,
Near Muktangan English School, Parvati, Pune 411009
Phone: 09890444795 Email: engress123@gmail.com



ENGRESS SERVICES

Yashashree, 26, Nirmal Bag Society,
Near Mukhtangan English School, Parvati, Pune 411 009
Tel: 09890444795 Email: engress123@gmail.com

Ref: ES/SCP/21-22/02

Date: 22/05/2022

CERTIFICATE

This is to certify that we have conducted Green Audit at Shree Santkrupa College of Pharmacy, Ghogaon in the Academic year 2021-22.

The College has adopted following Green Initiatives:

- Usage of Energy Efficient LED Light Fitting
- Maximum Usage of Day Lighting
- Provision of Separate bins for Dry & Wet Waste
- The College has installed Septic Tank and is cleaned periodically.
- Implementation of Rain Water Management Project
- Maintenance of good Internal Road
- Tree Plantation in the campus
- Creation of awareness by Display of Posters on Resource Conservation

We appreciate the support of Management, involvement of faculty members and students in the process of Energy Conservation & making the campus Green.

For Engress Services,



A Y Mehendale,
Certified Energy Auditor, EA-8192
ASSOCHAM GEM Certified Professional: GEM: 22/788

INDEX

Sr. No	Particulars	Page No
I	Acknowledgement	5
II	Executive Summary	6
III	Abbreviations	8
1	Introduction	9
2	Study of Present Energy Consumption	10
3	Study of Carbon Foot printing	12
4	Study of Usage of Renewable Energy	14
5	Study of Waste Management	15
6	Study of Rain Water Management	16
7	Study of Green & Sustainable Practices	17
	Annexure	
I	Details of Trees& Plants in the Campus	19

ACKNOWLEDGEMENT

We Engress Services, Pune, express our sincere gratitude to the management of at Shree Santkrupa College of Pharmacy, Ghogaon, for awarding us the assignment of Green Audit of their Campus for the Academic Year: 2021-22.

We are thankful to all the Principal and Staff members for helping us during the field study.

EXECUTIVE SUMMARY

1. Shree Santkrupa College of Pharmacy, Ghogaon consumes Energy in the form of Electrical Energy; used for various Electrical Equipment, office & other facilities.

1. Present Energy Consumption & CO₂ Emissions:

No	Parameter/ Value	Energy Purchased, kWh	CO ₂ Emissions, MT
1	Total	10608	9.5472
2	Maximum	1577	1.4193
3	Minimum	456	0.4104
4	Average	884	0.7956

3. Various initiatives taken for Energy Conservation:

- Usage of Energy Efficient LED Lighting
- Maximum Usage of Day Lighting

4. Usage of Renewable Energy & CO₂ Emission Reduction:

- It is recommended to install roof-top solar PV Plant on college building.

5. Waste Management:

5.1 Segregation of Waste at Source:

The Waste is segregated at source and the recyclable waste, like paper, plastic waste is handed over to Authorized waste collecting agent for further recycling.

5.2 Organic Waste Management:

The Institute has a Bio Composting Pit, to convert the Leafy Waste into Bio Compost.

5.3 Liquid Waste Management:

The College has installed Septic and is cleaned periodically.

5.4E-Waste Management:

It is recommended to dispose of the E Waste through Authorized Agency.

5.5 Sanitary Waste Incinerator:

It is recommended to install Sanitary Waste Incinerator for sanitary waste disposal.

6. Rain Water Management:

The College has Rain Water Management Project. The College has installed Pipes from the terrace and the Rain water falling on the terrace is used to increase the underground water table.

7. Green & Sustainable Initiatives

- Maintenance of good Internal Road
- Maintenance of Internal Garden
- Display of Posters on Resource Conservation
- Best Practices and Initiative for Social Awareness

8. Notes & Assumptions:

1. 1 kWh of Electrical Energy releases **0.9 Kg of CO₂** into atmosphere
2. Average Energy generated by **1 kWp** Solar PV Plant : **4 kWh/Day**
3. Annual Solar Energy Generation Days: **300 Nos**

9. References:

- For CO₂ Emissions: www.tatapower.com
- For Roof Top Solar Energy Generation: www.solarrooftop.gov.in
- For Various Indoor Air Parameters: www.ishrae.com
- For AQI & Water Quality Standards: www.cpcb.com

ABBREVIATIONS

BEE	Bureau of Energy Efficiency
kWh	Kilo Watt Hour
LPD	Liters Per Day
Kg	Kilo Gram
MT	Metric Ton
CO ₂	Carbon Di Oxide
Qty	Quantity

CHAPTER-I INTRODUCTION

1.1 Objectives:

1. To study present Energy Consumption
2. To Study CO₂ emissions
3. To study usage of Renewable Energy
4. Study of Waste Management
5. Study of Rain Water Management
6. Study of Green & Sustainable Practices

1.2 General Details of College: Table No 1:

No	Head	Particulars
1	Name of Institution	Shree Santkrupa College of Pharmacy, Ghogaon
2	Address	Ghogaon (Shivajinagar) Dist. Satara (M.H.) – 415 111
3	Affiliation	Shivaji University, Kolhapur



CHAPTER-II
STUDY OF PRESENT ENERGY CONSUMPTION

In this chapter, we present the analysis of last year Electricity Bills

Table No 2: Electrical Bill Analysis- 2021-22:

No	Month	Energy Purchased, kWh
1	Apr-21	1577
2	May-21	700
3	Jun-21	463
4	Jul-21	456
5	Aug-21	477
6	Sep-21	652
7	Oct-21	671
8	Nov-21	1072
9	Dec-21	1121
10	Jan-22	1402
11	Feb-22	1036
12	Mar-22	981
13	Total	10608
14	Maximum	1577
15	Minimum	456
16	Average	884

Chart No 1: Variation in Monthly Energy Consumption:

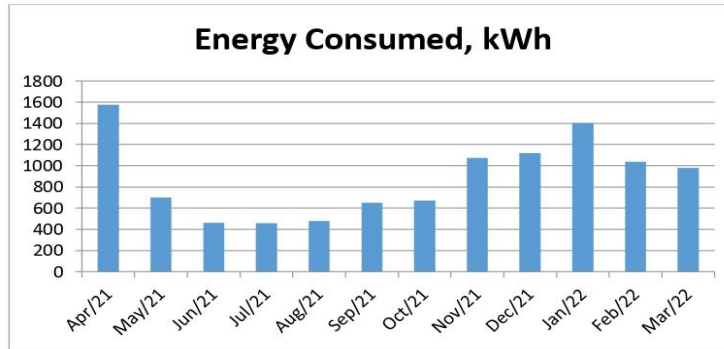


Table No 3: Variation in Important Parameters:

No	Parameter/ Variation	Energy Purchased, kWh
1	Total	10608
2	Maximum	1577
3	Minimum	456
4	Average	884

CHAPTER III STUDY OF CARBON FOOTPRINTING

A Carbon Foot print is defined as the Total Greenhouse Gas emissions, emitted due to various activities. In this we compute the emissions of Carbon-Di-Oxide, by usage of the various forms of Energy used by the College for performing its day to day activities

The College uses Electrical Energy for various Electrical gadgets.

Basis for computation of CO₂ Emissions:

The basis of Calculation for CO₂ emissions is as under.

- **1 kWh** of Electrical Energy releases **0.9 Kg of CO₂** into atmosphere

Based on the above Data we compute the CO₂ emissions which are being released in to the atmosphere by the College due to its Day to Day operations

Table No4: Month wise CO₂ Emissions:

No	Month	Energy Purchased, kWh	CO ₂ Emissions, MT
1	Mar-21	1577	1.52
2	Apr-21	700	0.73
3	May-21	463	0.52
4	Jun-21	456	0.52
5	Jul-21	477	0.54
6	Aug-21	652	0.70
7	Sep-21	671	0.71
8	Oct-21	1072	1.08
9	Nov-21	1121	1.12
10	Dec-21	1402	1.36
11	Jan-22	1036	1.03
12	Feb-22	981	0.99
13	Total	10608	10.83
14	Maximum	1577	1.52
15	Minimum	456	0.52
16	Average	884	0.90

Chart No 2: Month wise CO₂Emissions:

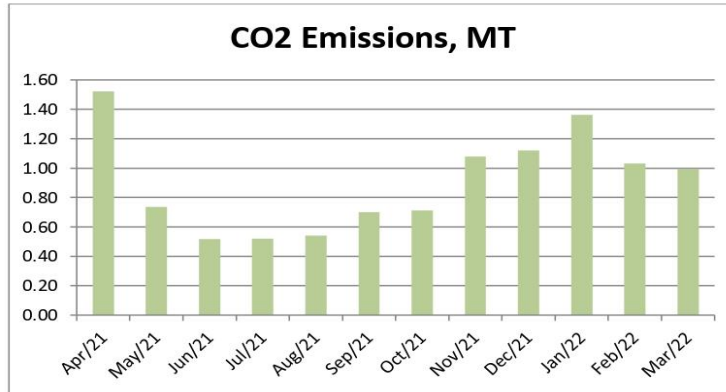


Table No 5: Variation in Important Parameters:

No	Parameter/ Variation	Energy Purchased, kWh	CO2 Emissions, MT
1	Total	10608	10.83
2	Maximum	1577	1.52
3	Minimum	456	0.52
4	Average	884	0.90

CHAPTER IV
STUDY OF USAGE OF RENEWABLE ENERGY

As on today College has not install solar roof-top PV plant.

CHAPTER V STUDY OF WASTE MANAGEMENT

5.1 Segregation of Waste at Source:

The Waste is segregated at source and the recyclable waste, like paper waste is handed over to authorized waste collecting agent for further recycling.



5.2 Bio Composting Pit:

The Institute has a Bio Composting Pit, to convert the Leafy Waste into Bio Compost.

Photograph of Bio Composting Pit:



5.3 Liquid Waste Management:

The College has installed Septic tank and is cleaned periodically.

5.4 E-Waste Management:

It is recommended to dispose of the E Waste through Authorized Agency.

5.5 Sanitary Waste Incinerator:

The College has not install Sanitary Waste Incinerator. It is recommended to install Sanitary Waste Incinerator.

CHAPTER-VI

STUDY OF RAIN WATER MANAGEMENT

The Institute has implemented the Rain Water Management Project. The Institute has installed Pipes from the terrace and the Rain water falling on the terrace is gathered and is used for recharging the water table.

Photograph of Rain Water Management Section:



CHAPTER-VII

STUDY OF GREEN & SUSTAINABLE PRACTICES

7.1 Pedestrian Friendly Roads:

The College has well maintained internal road to facilitate the easy movement of the students within the campus.

Photograph of Internal Road:



7.2 Internal Tree Plantation:

The College has well maintained landscaped garden in the campus.

Photograph of Tree plantation:



ANNEXURE-1:

DETAILS OF TREES & PLANTS:

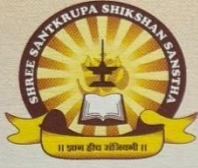
Presently the College Campus has more than 100 trees:

No	Name of Trees
1	Kadamba Tree
2	Gulmohor
3	Mangifera India
4	Coconut
5	Morpankhi
6	Cycus



Regd. No. MH/4775/Satara

DTE Code : 6394, MSBTE Code : 2144



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Green/Environmental Audit Report

2020-21

GREEN AUDIT REPORT OF SHREE SANTKRUPA COLLEGE OF PHARMACY, Ghogaon (Shivajinagar)



Year: 2020-21

Prepared by:

Enrich Consultants

Yashashree, 26, Nirmal Bag Society,
Near Muktagan English School, Parvati, Pune 411009
Phone: 09890444795 Email: enrichcons@gmail.com

MAHARASHTRA ENERGY DEVELOPMENT AGENCY <small>An ISO 9001 : 2000 Reg. no. : RQ 91 / 2462</small>	
	Maharashtra Energy Development Agency (Government of Maharashtra Institution) Aundh Road, Opposite Spicer College Road, Near Commissionerate of Animal Husbandary, Aundh, Pune, Maharashtra 411067 Ph No: 020-35000450 Email: eee@mahaurja.com , Web: www.mahaurja.com
ECN/2021-22/CR-14/1577	22 nd April, 2021
CERTIFICATE OF REGISTRATION FOR CLASS 'A'	
We hereby certify that, the firm having following particulars is registered with MAHARASHTRA ENERGY DEVELOPMENT AGENCY (MEDA) under given category as "Energy Planner & Energy Auditor" in Maharashtra for Energy Conservation Programme of MEDA.	
Name and Address of the firm	: M/s Enrich Consultants Yashashree, Plot No. 26, Nirmal Bag Society, Near Mukhtangan English School, Parvati, Pune - 411009.
Registration Category	: <i>Empanelled Consultant for Energy Conservation Programme for Class 'A'</i>
Registration Number	: MEDA/ECN/2021-22/Class A/EA-03
<ul style="list-style-type: none">• Energy Conservation Programme intends to identify areas where wasteful use of energy occurs and to evaluate the scope for Energy Conservation and take concrete steps to achieve the evaluated energy savings.• MEDA reserves the right to visit at any time without giving prior information to verify quarterly activities performed by the firm and canceling the registration, if the information is found incorrect.• This empanelment is valid till 21st April, 2023 from the date of registration, to carry out energy audits under the Energy Conservation Programme• The Director General, MEDA reserves the right to cancel the registration at any time without assigning any reasons thereof.	
 General Manager (EC)	

Enrich Consultants

Yashashree, 26, Nirmal Bag Society,
Near Mukhtangan English School, Parvati, Pune 411 009
Tel: 09890444795 Email: enrichcons@gmail.com

Ref: EC/SCP/20-21/02

Date: 26/05/2021

CERTIFICATE

This is to certify that we have conducted Green Audit at Shree Santkrupa College of Pharmacy, Ghogaon in the Academic year 2020-21.

The College has adopted following Green Initiatives:

- Usage of Energy Efficient LED Light Fitting
- Maximum Usage of Day Lighting
- Provision of Separate bins for Dry & Wet Waste
- The College has installed Septic Tank and is cleaned periodically.
- Implementation of Rain Water Management Project
- Maintenance of good Internal Road
- Tree Plantation in the Campus
- Creation of awareness by Display of Posters on Resource Conservation

We appreciate the support of Management, involvement of faculty members and students in the process of Energy Conservation & making the campus Green.

For Enrich Consultants,



A Y Mehendale,
Certified Energy Auditor
EA-8192

INDEX

Sr. No	Particulars	Page No
I	Acknowledgement	5
II	Executive Summary	6
III	Abbreviations	8
1	Introduction	9
2	Study of Present Energy Consumption	10
3	Study of Carbon Foot printing	12
4	Study of Usage of Renewable Energy	14
5	Study of Waste Management	15
6	Study of Rain water Management	16
7	Study of Green & Sustainable Practices	17
	Annexure	
I	Details of Trees& Plants in the Campus	19

ACKNOWLEDGEMENT

We Enrich Consultants, Pune, express our sincere gratitude to the management of at Shree Santkrupa College of Pharmacy, Ghogaon, for awarding us the assignment of Green Audit of their Campus for the Academic Year: 2020-21.

We are thankful to all the Principal and Staff members for helping us during the field study.

EXECUTIVE SUMMARY

1. **Shree Santkrupa College of Pharmacy, Ghogaon** consumes Energy in the form of **Electrical Energy** used for various Electrical Equipment, Office & other facilities.

2. Present Energy Consumption & CO₂ Emissions:

No	Parameter/ Value	Energy Purchased, kWh	CO ₂ Emissions, MT
1	Total	7132	6.418
2	Maximum	1239	1.115
3	Minimum	377	0.339
4	Average	594.33	0.534

3. Various initiatives taken for Energy Conservation:

- Usage of Energy Efficient LED Lighting
- Maximum Usage of Day Lighting

4. Usage of Renewable Energy & CO₂ Emission Reduction:

- It is recommended to install roof-top solar PV Plant on college building.

5. Waste Management:

5.1 Segregation of Waste at Source:

The Waste is segregated at source in separate Waste Bins & is handed over for further action to Municipal Corporation.

5.2 Organic Waste Management:

The Institute has a Bio Composting Pit, to convert the Leafy Waste into Bio Compost.

5.3 Liquid Waste Management:

The College has installed Septic and is cleaned periodically.

5.4E-Waste Management:

It is recommended to dispose E-Waste through Authorized collecting agency.

5.5 Sanitary Waste Incinerator:

It is recommended to install Sanitary Waste Incinerator for sanitary waste disposal.

6. Rain Water Management:

The College has installed the Rainwater management project, the rain water falling on the terrace is collected and is used for increasing the under the underground water level.

7. Green & Sustainable Initiatives

- Maintenance of good Internal Road
- Maintenance of Internal Garden
- Display of Posters on Resource Conservation

8. Notes & Assumptions:

1. 1 kWh of Electrical Energy releases **0.9 Kg of CO₂** into atmosphere

9. References:

- For CO₂ Emissions: www.tatapower.com

ABBREVIATIONS

BEE	Bureau of Energy Efficiency
kWh	Kilo Watt Hour
LPD	Liters Per Day
Kg	Kilo Gram
MT	Metric Ton
CO ₂	Carbon Di Oxide
Qty	Quantity

CHAPTER-I INTRODUCTION

1.1 Objectives:

1. To study present Energy Consumption
2. To Study CO₂ emissions
3. To study usage of Renewable Energy
4. Study of Waste Management
5. Study of Rain Water Management
6. Study of Green & Sustainable Practices

1.2 General Details of College: Table No 1:

No	Head	Particulars
1	Name of Institution	Shree Santkrupa College of Pharmacy, Ghogaon
2	Address	Ghogaon (Shivajinagar) Dist. Satara (M.H.) – 415 111
3	Affiliation	Shivaji University, Kolhapur

CHAPTER-II
STUDY OF PRESENT ENERGY CONSUMPTION

In this chapter, we present the analysis of last year Electricity Bills

Table No 2: Electrical Bill Analysis- 2020-21:

No	Month	Energy Purchased, kWh
1	Apr-20	1239
2	May-20	377
3	Jun-20	424
4	Jul-20	460
5	Aug-20	474
6	Sep-20	576
7	Oct-20	480
8	Nov-20	478
9	Dec-20	457
10	Jan-21	642
11	Feb-21	716
12	Mar-21	809
13	Total	7132
14	Maximum	1239
15	Minimum	377
16	Average	594.33

Chart No 1: Variation in Monthly Energy Consumption:

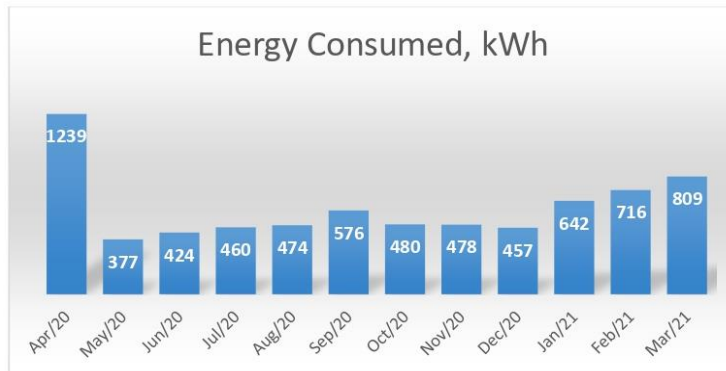


Table No 3: Variation in Important Parameters:

No	Parameter/ Variation	Energy Purchased, kWh
1	Total	7132

2	Maximum	1239
3	Minimum	377
4	Average	594.33

CHAPTER III STUDY OF CARBON FOOTPRINTING

A Carbon Foot print is defined as the Total Greenhouse Gas emissions, emitted due to various activities. In this we compute the emissions of Carbon-Di-Oxide, by usage of the various forms of Energy used by the College for performing its day to day activities

The College uses Electrical Energy for various Electrical gadgets.

Basis for computation of CO₂ Emissions:

The basis of Calculation for CO₂ emissions is as under.

- 1 kWh of Electrical Energy releases 0.9 Kg of CO₂ into atmosphere

Based on the above Data we compute the CO₂ emissions which are being released in to the atmosphere by the College due to its Day to Day operations

Table No4: Month wise CO₂ Emissions:

No	Month	Energy Purchased, kWh	CO ₂ Emissions, MT
1	Apr-20	1239	1.115
2	May-20	377	0.339
3	Jun-20	424	0.381
4	Jul-20	460	0.414
5	Aug-20	474	0.426
6	Sep-20	576	0.518
7	Oct-20	480	0.432
8	Nov-20	478	0.430
9	Dec-20	457	0.411
10	Jan-21	642	0.577
11	Feb-21	716	0.644
12	Mar-21	809	0.728
13	Total	7132	6.418
14	Maximum	1239	1.115
15	Minimum	377	0.339
16	Average	594.333	0.534

Chart No 2: Month wise CO₂Emissions:

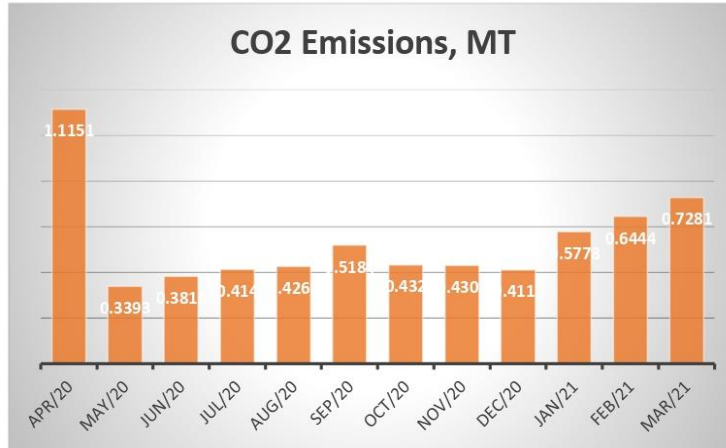


Table No 5: Variation in Important Parameters:

No	Parameter/ Variation	Energy Purchased, kWh	CO2 Emissions, MT
1	Total	7132	6.418
2	Maximum	1239	1.115
3	Minimum	377	0.339
4	Average	594.333	0.534

CHAPTER IV
STUDY OF USAGE OF RENEWABLE ENERGY

As on today College has not install solar roof-top PV plant, Solar thermal water heating plant, it is recommend to install solar rooftop plant on the College building.

CHAPTER V STUDY OF WASTE MANAGEMENT

5.1 Segregation of Waste at Source:

The Waste is segregated at source and the recyclable waste, like paper waste is handed over to authorized waste collecting agent for further recycling.



5.2 Organic Waste Management:

The Institute has a Bio Composting Pit, to convert the Leafy Waste into Bio Compost.



5.3 Liquid Waste Management:

The College has installed Septic tank and is cleaned periodically.

5.4 E-Waste Management:

The E-Waste is disposed of through Authorized Agency.

5.5 Sanitary Waste Incinerator:

The College has not install Sanitary Waste Incinerator. It is recommended to install Sanitary Waste Incinerator.

CHAPTER-VI

STUDY OF RAIN WATER MANAGEMENT

The College has implemented the Rain Water Management Project. The College has installed Pipes from the terrace and the Rain water falling on the terrace is gathered and is used to increase the underground water table.

Photograph of Rain Water Management Pipe:



CHAPTER-VII STUDY OF GREEN & SUSTAINABLE PRACTICES

7.1 Pedestrian Friendly Roads:

The College has well maintained internal road to facilitate the easy movement of the students within the campus.

Photograph of Internal Road:



7.2 Internal Tree Plantation:

The College has well maintained landscaped garden in the campus.

Photograph of Tree plantation:



7.3 Provision of Ramp:

The College has facility for ramp, for easy movement for Divyaang.



**ANNEXURE-1:
DETAILS OF TREES& PLANTS:**

Presently the College Campus has well maintained medicinal plantation:

No	Name of Trees
1	Kadamba Tree
2	Gulmohor
3	Mangifera India
4	Coconut
5	Morpankhi
6	Cycus





Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Certificate of Energy Audit 2022-23

Energy Audit Report: Shree Santkrupa College of Pharmacy, Ghogaon: 2022-23



M/s.Chandrakant Electricals, Co.

Shetphale, Tal: Atpadi Sangali 415 306 Phones: 09423272440
Email: chandrakant.electricals23666@gmail.com

ENERGY AUDIT CERTIFICATE

Certificate No: CE/SCP/22-23/01

Date: 07/11/2023

This is to certify that we have conducted an Energy Audit at Shree Santkrupa College of Pharmacy, Ghogaon, in the Year 2022-23.

The Institute has adopted following Energy Efficient practices:

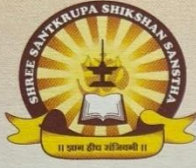
- Usage of Energy Efficient LED Fittings
- Maximum usage of Day Lighting
- Installation of Solar Power Plant

We appreciate the support of Management, involvement of faculty members and students in the process of making the Campus Energy Efficient.

For, M/s.Chandrakant Electricals, Co.



(Chandrakant Nanvare)



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Certificate of Energy Audit 2021-22

Energy Audit Report: Shree Santkrupa College of Pharmacy, Ghogaon: 21-22



M/s.Chandrakant Electricals, Co.

Shetphale, Tal: Atpadi Sangali 415 306 Phones: 09423272440
Email: chandrakant.electricals23666@gmail.com

Ref: CE/SCP/21-22/01

Date: 20/06/2022

CERTIFICATE

This is to certify that we have conducted Energy Audit at Shree Santkrupa College of Pharmacy, Ghogaon in the Academic Year 2021-22.

The College has adopted following Energy Efficient practices:

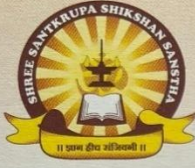
- Usage of Energy Efficient LED Fittings
- Maximum usage of Day Lighting

We appreciate the support of Management, involvement of faculty members and students in the process of making the Campus Energy Efficient.

For, M/s.Chandrakant Electricals, Co.



(Chandrakant Nanvare)



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Certificate of Energy Audit 2020-21

Energy Audit Report: Shree Santkrupa College of Pharmacy, Ghogaon: 20-21

Enrich Consultants

Yashashree, 26, Nirmal Bag Society,
Near Muktangan English School, Parvati, Pune 411 009
Tel: 09890444795 Email: enrichcons@gmail.com

Ref: EC/SCP/20-21/01

Date: 26/05/2021

CERTIFICATE

This is to certify that we have conducted Energy Audit at Shree Santkrupa College of Pharmacy, Ghogaon in the Academic year 2020-21.

The College has adopted following Energy Efficient practices:

- Maximum usage of Day Lighting
- Usage of Energy Efficient LED Light Fitting

We appreciate the support of Management, involvement of faculty members and students in the process of making the Campus Energy Efficient.

For Enrich Consultants,



A Y Mehendale,
Certified Energy Auditor
EA-8192

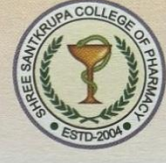
Regd. No. MH/4775/Satara

DTE Code : 6394, MSBTE Code : 2144



Shree Santkrupa Shikshan Sanstha's
SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Energy Audit Report

2022-23

ENERGY AUDIT REPORT

of

Shree Santkrupa Shikshan Sanstha's

**SHREE SANTKRUPA COLLEGE OF
PHARMACY,**

Ghogaon (Shivajinagar) Dist. Satara (M.H.) – 415 111



Year: 2022-23

Prepared by:

M/s.Chandrakant Electricals,Co.

Shetphale, Tal: Atpadi
Sangali 415 306

Phone: 09423272440 Email: chandrakant.electricals23666@gmail.com



M/s.Chandrakant Electricals, Co.

Shetphale, Tal: Atpadi Sangali 415 306 Phones: 09423272440

Email: chandrakant.electricals23666@gmail.com

ENERGY AUDIT CERTIFICATE

Certificate No: CE/SCP/22-23/01

Date: 07/11/2023

This is to certify that we have conducted an Energy Audit at Shree Santkrupa College of Pharmacy, Ghogaon, in the Year 2022-23.

The Institute has adopted following Energy Efficient practices:

- Usage of Energy Efficient LED Fittings
- Maximum usage of Day Lighting
- Installation of Solar Power Plant

We appreciate the support of Management, involvement of faculty members and students in the process of making the Campus Energy Efficient.

For, M/s.Chandrakant Electricals, Co.



(Chandrakant Nanvare)

MEDA Registration Certificates

MAHARASHTRA ENERGY DEVELOPMENT AGENCY

Maharashtra Energy Development Agency
(Government of Maharashtra Institution)
Aundh Road, Opposite Spicer College Road, Near Commissionerate of Animal Husbandary,
Aundh, Pune, Maharashtra 411067
Ph No: 020-35000450
Email: eee@mahaurja.com, Web: www.mahaurja.com

ECN/2022-23/CR-01/1708 10th May, 2022

**CERTIFICATE OF REGISTRATION
FOR CLASS 'B'**


We hereby certify that, the firm having following particulars is registered with **MAHARASHTRA ENERGY DEVELOPMENT AGENCY (MEDA)** under given category as "Energy Planner & Energy Auditor" in Maharashtra for Energy Conservation Programme of MEDA.

Name and Address of the firm : M/s. Chandrakant Electrical, Co.
A/P: Shetphale, Tal: Atpadi,
Dist.: Sangli – 415 306.

Registration Category : *Empanelled Consultant for Energy Conservation Programme for Class 'B'*

Registration Number : *MEDA/ECN/2022-23/Class B/EA-09.*

- Energy Conservation Programme intends to identify areas where wasteful use of energy occurs and to evaluate the scope for Energy Conservation and take concrete steps to achieve the evaluated energy savings.
- MEDA reserves the right to visit at any time without giving prior information to verify quarterly activities performed by the firm and canceling the registration, if the information is found incorrect.
- This empanelment is valid till **09th May, 2024** from the date of registration, to carry out energy audits under the Energy Conservation Programme
- The Director General, MEDA reserves the right to cancel the registration at any time without assigning any reasons thereof.


General Manager (EC)

INDEX

Sr. No	Particulars	Page No
I	Acknowledgement	5
II	Executive Summary	6
III	Abbreviations	7
1	Introduction	8
2	Study of Connected Load	9
3	Study of Present Energy Consumption	10
4	Study of Energy Performance Index	11
5	Study of Lighting	12
6	Study of Renewable Energy & Energy Efficiency	14

ACKNOWLEDGEMENT

We M/s.Chandrakant Electricals, Co.,Sangli, express our sincere gratitude to the management of Shree Santkrupa College of Pharmacy, Ghogaon for awarding us the assignment of Energy Audit of their Campus for the Year: 2022-23.

We are thankful to all the staff members for helping us during the field study.

EXECUTIVE SUMMARY

1. **Shree Santkrupa College of Pharmacy, Ghogaon** consumes Energy in the form of **Electrical Energy**; used for various Electrical Equipment, office & other facilities.

2. Present Connected Load & Annual Energy Consumption:

No	Particulars	Value	Unit
1	Total Connected Load	52	kW
2	Annual Energy Consumption	18593	kWh
3	Annual CO ₂ Emissions	17.13	MT

3. Energy Performance Index:

No	Particulars	Value	Unit
1	Total Annual Energy Consumed	18593	kWh
2	Total Built up area of Institute	5901.66	m ²
3	Energy Performance Index =(1) / (2)	3.15	kWh/m ²

4. Study of Lighting Power Density & % of LED Lighting:

No	Particulars	Value	Unit
1	Lighting Power Density	0.86	W/m ²
2	% of Usage of LED Lighting to Total Lighting Load	4.41	%

5. Renewable Energy & Energy Efficiency Projects:

- Usage of Energy Efficient LED Fittings
- Maximum usage of Day Lighting
- Installation of 25 Kw Capacity Solar Power Plant

6. Assumption:

1. **1 kWh** of Electrical Energy releases **0.9 Kg** of **CO₂** into atmosphere

7. References:

- Audit Methodology: www.mahaurja.com
- Energy Conservation Building Code: ECBC-2017: www.beeindia.gov.in
- For CO₂ Emissions: www.tatapower.com

ABBREVIATIONS

LED	: Light Emitting Diode
MSEDCL	: Maharashtra State Electricity Distribution Company Limited
BEE	: Bureau of Energy Efficiency
ECBC	: Energy Conservation Building Code
MEDA	: Maharashtra Energy Development Agency
PV	: Photo Voltaic
Kg	: Kilo Gram
kWh	: kilo-Watt Hour
CO ₂	: Carbon Di Oxide
MT	: Metric Ton

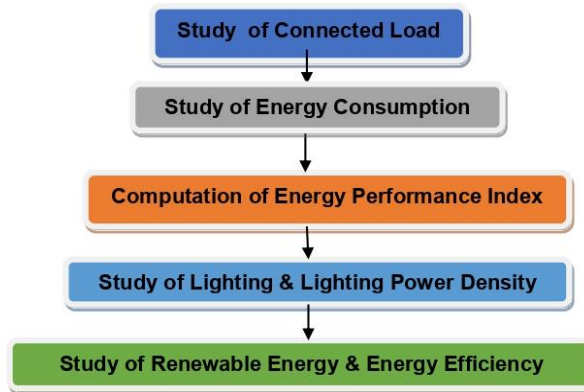
CHAPTER-I INTRODUCTION

1.1 Introduction:

An Energy Audit is conducted at Shree Santkrupa College of Pharmacy, Ghogaon. The guidelines followed for conducting the Energy Audit are:

- BEE India's Energy Conservation Building Code: ECBC-2017
- Maharashtra Energy Development Agency (www.mahaurja.com)
- Tata Power: www.tatapower.com

1.2 Audit Procedural Steps:



1.3 Institute Location Image:



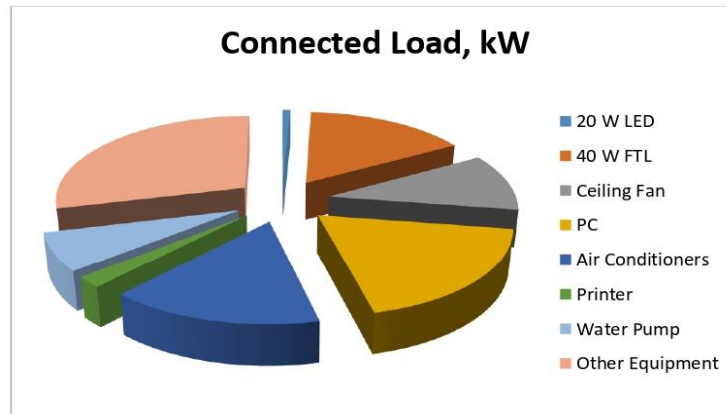
CHAPTER-II STUDY OF CONNECTED LOAD

The major contributors to the connected load of the Institute include:

Table No 1: Study of Equipment wise Connected Load:

No	Equipment	Qty	Load, W/Unit	Load, kW
1	20 W LED	19	20	0.38
2	40 W FTL	206	40	8.24
3	Ceiling Fan	86	65	5.59
4	PC	65	150	9.75
5	Air Conditioners	4	2000	8
6	Printer	7	150	1.05
7	Water Pump	1	3730	3.73
8	Other Equipment	100	150	15
9	Total			52

Chart No 1: Study of Connected Load:



**CHAPTER-III
STUDY OF PRESENT ENERGY CONSUMPTION**

In this chapter, we present the analysis of Electrical Energy Consumption.

Table No 2: Electrical Bill Analysis- 2022-23:

No	Month	Energy Consumed, kWh	LPG Consumption, Kg	CO2 Emissions, MT
1	Apr-22	1143	10	1.06
2	May-22	1356	12	1.25
3	Jun-22	1440	11	1.33
4	Jul-22	1560	13	1.44
5	Aug-22	1725	12	1.58
6	Sep-22	1668	14	1.54
7	Oct-22	1710	14	1.58
8	Nov-22	1653	13	1.52
9	Dec-22	1473	14	1.36
10	Jan-23	1650	12	1.52
11	Feb-23	1563	12	1.44
12	Mar-23	1652	12	1.52
13	Total	18593	149	17.13
14	Maximum	1725	14	1.58
15	Minimum	1143	10	1.06
16	Average	1549.41	12.42	1.43

Chart No 2: Variation in Monthly Energy Consumption:

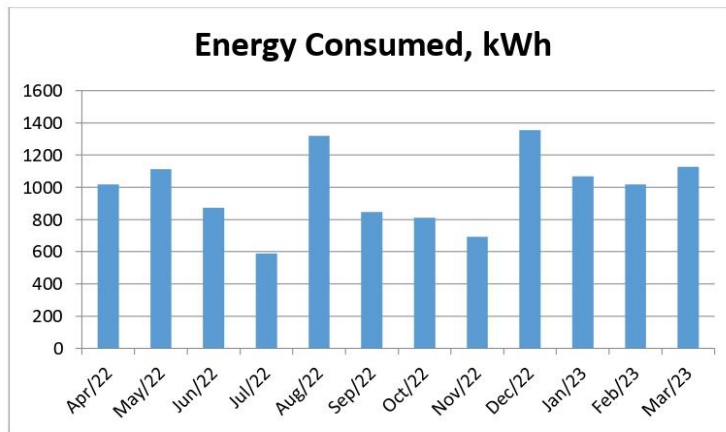


Chart No 3: Variation in Monthly LPG Consumption:

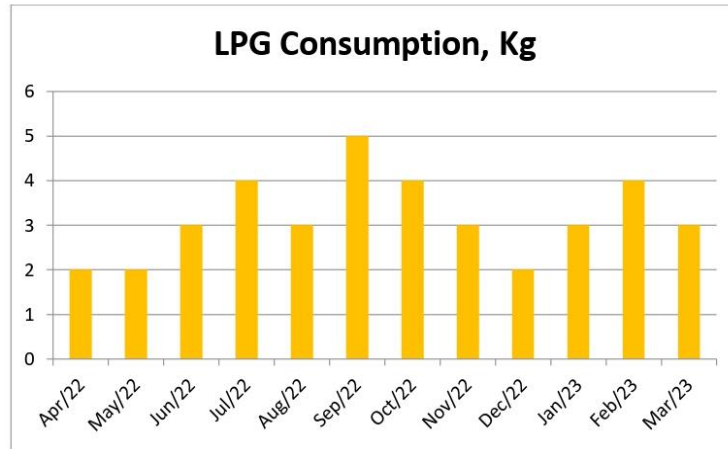


Table No 4: Variation in Important Parameters:

No	Parameter/ Variation	Energy Consumed, kWh	LPG Consumption, Kg	CO ₂ Emissions, MT
1	Total	18593	149	17.13
2	Maximum	1725	14	1.58
3	Minimum	1143	10	1.06
4	Average	1549.41	12.42	1.43

CHAPTER-IV

STUDY OF ENERGY PERFORMANCE INDEX

Energy Performance Index: Energy Performance Index of a Building is its Annual Energy Consumption in Kilo Watt Hours per square meter of the Building

It is determined by:

$$\text{EPI} = \frac{\text{Annual Energy Consumption in kWh}}{\text{Total Built-up area in m}^2}$$

Now we compute the EPI for the Institute as under:

Table No4: Computation of Energy Performance Index:

No	Particulars	Value	Unit
1	Total Annual Energy Consumed	18593	kWh
2	Total Built up area of Institute	5901.66	m ²
3	Energy Performance Index =(1) / (2)	3.15	kWh/m ²

CHAPTER V STUDY OF LIGHTING

Terminology:

- 1. Lumen** is a unit of light flow or luminous flux. The lumen rating of a lamp is a measure of the total light output of the lamp. The most common measurement of light output (or luminous flux) is the lumen. Light sources are labeled with an output rating in lumens.
- 2. Lux** is the metric unit of measure for illuminance of a surface. One lux is equal to one lumen per square meter.
- 3. Circuit Watts** is the total power drawn by lamps and ballasts in a lighting circuit under assessment.
- 4. Installed Load Efficacy** is the average maintained illuminance provided on a horizontal working plane per circuit watt with general lighting of an interior. Unit: lux per watt per square metre (lux/W/m²)
- 5. Lamp Circuit Efficacy** is the amount of light (lumens) emitted by a lamp for each watt of power consumed by the lamp circuit, i.e. including control gear losses. This is a more meaningful measure for those lamps that require control gear. Unit: lumens per circuit watt (lm/W)
- 6. Installed Power Density.** The installed power density per 100 lux is the power needed per square metre of floor area to achieve 100 lux of average maintained illuminance on a horizontal working plane with general lighting of an interior
Unit: watts per square metre per 100 lux (W/m²/100 lux) 100 Installed power density (W/m²/100 lux)
- 7. Lighting Power Density:** It is defined as Total Lighting Load in a room divided by the Area of that Room in square meters.

In this Chapter we compute: Lighting Power Density of a Class Room. We also compute the percentage usage of LED Lighting to total Lighting Load of the Institute.

Table No 5: Computation of Lighting Power Density:

No	Particulars	Value	Unit
1	No of 20 W LED Tube Lights in Class Room	04	Nos
2	Demand of 20 W LED Tube Light	20	W/Unit
3	Total Lighting Load in the Class Room= (1) * (2)	80	W
4	Area of Class Room	92.47	m ²
5	Lighting Power Density = (3)/ (4)	0.86	W/m ²

Now, we compute the usage of LED Lighting to Total Lighting Load, as under.

Table No 6: Percentage Usage of LED Lighting to Annual Lighting Load:

No	Particulars	Value	Unit
1	No of 40 W FTL Fittings	206	Nos
2	Demand of 40 W FTL Fitting	40	W/Unit
3	Total Electrical Load of 40 W FTL Fittings	8.24	kW
4	No of 20 W LED Tube Lights	19	Nos
5	Demand of 20 W LED Tube Light	20	W/Unit
6	Total Electrical Load of 20 W LED Fittings	0.38	kW
7	Annual Total Lighting Load = 3+6	8.62	kWh
8	Annual LED Lighting Load = 6	0.38	kWh
9	Annual Lighting Requirement met by LED= $8 \times 100 / 7$	4.41	%

CHAPTER-VI
STUDY OF RENEWABLE ENERGY & ENERGY EFFICIENCY

The Institute has installed a **25 kWp** capacity Roof top Solar PV Plant this year.
 Now we compute the Percentage of Alternate Energy to Annual Energy demand:

Table No 7: Computation of % Annual Energy Demand met by Alternate Energy:

No	Particulars	Value	Unit
1	Energy Purchased from MSEDCL	18593	kWh
2	Installed Roof Top Solar PV Plant Capacity	25	kWp
3	Average Daily Energy Generated	4	kWh/kWp
4	Annual Generation Days	300	Nos
5	Annual Solar Energy Generated	30000	kWh
6	Total Energy Demand = (1) + (5)	35887	kWh
7	Expecting % of Usage of Alternate Energy to Total Annual Energy Demand for Current Year Consumption= (5)*100/ (6)	61	%



Regd. No. MH/4775/Satara

DTE Code : 6394, MSBTE Code : 2144



Shree Santkrupa Shikshan Sanstha's
SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Energy Audit Report

2021-22

ENERGY AUDIT REPORT

of

Shree Santkrupa Shikshan Sanstha's
SHREE SANTKRUPA COLLEGE OF PHARMACY,

Ghogaon (Shivajinagar)

Dist. Satara (M.H.) – 415 111



Year: 2021-22

Prepared by:

M/s.Chandrakant Electricals,Co.

Shetphale, Tal: Atpadi
Sangali 415 306

Phone: 09423272440 Email: chandrakant.electricals23666@gmail.com

MAHARASHTRA ENERGY DEVELOPMENT AGENCY



Maharashtra Energy Development Agency

(Government of Maharashtra Institution)

Aundh Road, Opposite Spicer College Road, Near Commissionerate of Animal Husbandary,

Aundh, Pune, Maharashtra 411067

Ph No: 020-35000450

Email: eee@mahaurja.com, Web: www.mahaurja.com

ECN/2022-23/CR-01/1708

10th May, 2022

**CERTIFICATE OF REGISTRATION
FOR CLASS 'B'**

We hereby certify that, the firm having following particulars is registered with **MAHARASHTRA ENERGY DEVELOPMENT AGENCY (MEDA)** under given category as "Energy Planner & Energy Auditor" in Maharashtra for Energy Conservation Programme of MEDA.

Name and Address of the firm : M/s. Chandrakant Electrical, Co.
A/P: Shetphale, Tal: Atpadi,
Dist.: Sangli – 415 306.

Registration Category : *Empanelled Consultant for Energy Conservation Programme for Class 'B'*

Registration Number : *MEDA/ECN/2022-23/Class B/EA-09.*

- Energy Conservation Programme intends to identify areas where wasteful use of energy occurs and to evaluate the scope for Energy Conservation and take concrete steps to achieve the evaluated energy savings.
- MEDA reserves the right to visit at any time without giving prior information to verify quarterly activities performed by the firm and canceling the registration, if the information is found incorrect.
- This empanelment is valid till **09th May, 2024** from the date of registration, to carry out energy audits under the Energy Conservation Programme
- The Director General, MEDA reserves the right to cancel the registration at any time without assigning any reasons thereof.

General Manager (EC)



M/s.Chandrakant Electricals, Co.

Shetphale, Tal: Atpadi Sangali 415 306 Phones: 09423272440

Email: chandrakant.electricals23666@gmail.com

Ref: CE/SCP/21-22/01

Date: 20/06/2022

CERTIFICATE

This is to certify that we have conducted Energy Audit at Shree Santkrupa College of Pharmacy, Ghogaon in the Academic Year 2021-22.

The College has adopted following Energy Efficient practices:

- Usage of Energy Efficient LED Fittings
- Maximum usage of Day Lighting

We appreciate the support of Management, involvement of faculty members and students in the process of making the Campus Energy Efficient.

For, M/s.Chandrakant Electricals, Co.



(Chandrakant Nanvare)

INDEX

Sr. No	Particulars	Page No
I	Acknowledgement	5
II	Executive Summary	6
III	Abbreviations	7
1	Introduction	8
2	Study of Connected Load	9
3	Study of Present Energy Consumption	11
4	Carbon Foot Printing	13
5	Study of Usage of Alternate Energy	14
6	Study of LED Lighting	15

ACKNOWLEDGEMENT

We M/s.Chandrakant Electricals,Co.Sangli, express our sincere gratitude to the management of Shree Santkrupa College of Pharmacy, Ghogaon for awarding us the assignment of Energy Audit of their Campus for the Academic Year: 21-22.

We are thankful to all the Principal and Staff members for helping us during the field study.

EXECUTIVE SUMMARY

1. **Shree Santkrupa College of Pharmacy, Ghogaon** consumes Energy in the form of **Electrical Energy** used for various Electrical Equipment, office & other facilities.

2. Present Energy Consumption & CO₂ Emission:

No	Parameter/ Value	Energy Purchased, kWh	CO ₂ Emissions, MT
1	Total	10608	9.5472
2	Maximum	1577	1.4193
3	Minimum	456	0.4104
4	Average	884	0.7956

3. Energy Conservation projects already installed:

- Usage of Energy Efficient LED fittings
- Maximum Usage of Day Lighting

4. Usage of Alternate Energy:

- As on today College has not installed solar rooftop power plant. It is recommended to install solar power rooftop system on the college building as per availability of funds.

5. Usage of LED Lighting:

- The Total Lighting Load is **8.62 KW**
- The Total LED Lighting Load is **0.38 KW**.
- The percentage of Annual LED Lighting to Annual Lighting Demand is **4.41 %**.

6. Assumptions:

1. **1 kWh** of Electrical Energy releases **0.9 Kg of CO₂** into atmosphere.
2. **100 LPD** Solar Thermal System saves **1500 kWh** of Electrical Energy per Annum.
3. Average Energy generated by **1 kWp** Solar PV Plant: **4 kWh/Day**.
4. Annual Solar Energy Generation Days: **300 Nos**.

7. References:

- For CO₂ Emissions: www.tatapower.com
- For Roof Top Solar Energy Generation: www.solarrooftop.gov.in
- For Various Indoor Air Parameters: www.ishrae.com
- For AQI & Water Quality Standards: www.cpcb.com

ABBREVIATIONS

LED	: Light Emitting Diode
MSEDCL	: Maharashtra State Electricity Distribution Company Limited
IQAC	: Internal Quality Assurance Cell
BEE	: Bureau of Energy Efficiency
FTL	: Fluorescent Tube Light
Kg	: Kilo Gram
kWh	: kilo-Watt Hour
CO ₂	: Carbon Di Oxide
MT	: Metric Ton

CHAPTER-I INTRODUCTION

1.1 Objectives:

1. To study present Energy Consumption
2. To Study the present CO₂ emissions
3. To study usage of Alternate Energy
4. To study usage of LED Lighting

1.2 Table No 1: General Details of the College:

No	Head	Particulars
1	Name of Institution	Shree Santkrupa College of Pharmacy, Ghogaon
2	Address	Ghogaon (Shivajinagar) Dist. Satara (M.H.) – 415 111
3	Affiliation	Shivaji University, Kolhapur



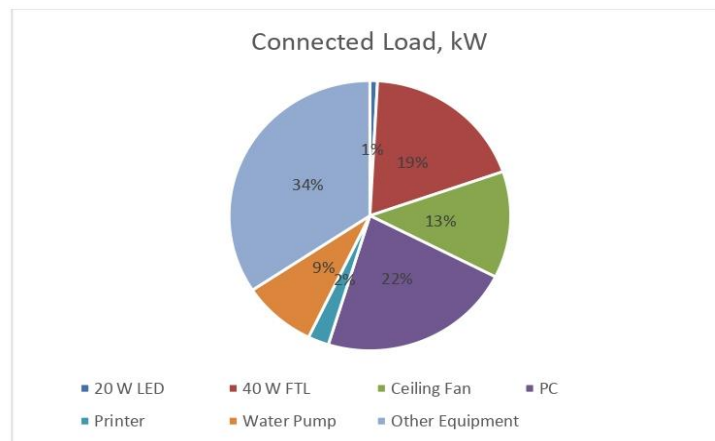
CHAPTER-II STUDY OF CONNECTED LOAD

The major contributors to the connected load of the College include:

Table No 2: Study of Equipment wise Connected Load:

No	Equipment	Qty	Load, W/Unit	Load, kW
1	20 W LED	19	20	0.38
2	40 W FTL	206	40	8.24
3	Ceiling Fan	86	65	5.59
4	PC	65	150	9.75
5	Printer	7	150	1.05
6	Water Pump	1	3730	3.73
7	Other Equipment	100	150	15
8	Total			44

Chart No 1: Study of Connected Load:



CHAPTER-III
STUDY OF PRESENT ENERGY CONSUMPTION

In this chapter, we present the analysis of Electrical Energy Consumption.

Table No 3: Electrical Bill Analysis- 2021-22:

No	Month	Energy Consumed, kWh	LPG Consumption, Kg	CO2 Emissions, MT
1	Apr-21	1577	38	1.52
2	May-21	700	39	0.73
3	Jun-21	463	37	0.52
4	Jul-21	456	41	0.52
5	Aug-21	477	42	0.54
6	Sep-21	652	42	0.70
7	Oct-21	671	40	0.71
8	Nov-21	1072	42	1.08
9	Dec-21	1121	41	1.12
10	Jan-22	1402	38	1.36
11	Feb-22	1036	37	1.03
12	Mar-22	981	41	0.99
13	Total	10608	478	10.83
14	Maximum	1577	42	1.52
15	Minimum	456	37	0.52
16	Average	884	39.83	0.90

Chart No 2: Variation in Monthly Energy Consumption:

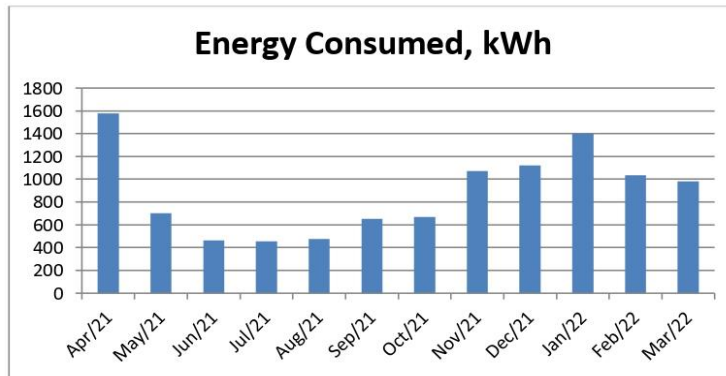


Chart No 3: Variation in Monthly LPG Consumption:

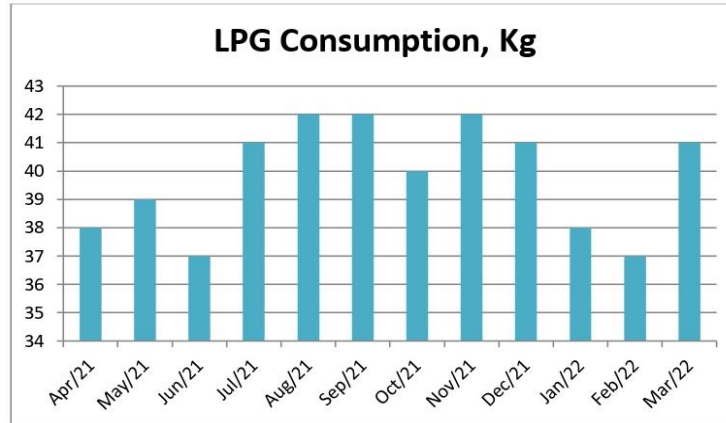


Table No 4: Variation in Important Parameters:

No	Parameter/ Variation	Energy Consumed, kWh	LPG Consumption, Kg	CO ₂ Emissions, MT
1	Total	10608	478	10.83
2	Maximum	1577	42	1.52
3	Minimum	456	37	0.52
4	Average	884	39.83	0.90

CHAPTER-IV CARBON FOOTPRINTING

A Carbon Foot print is defined as the Total Greenhouse Gas emissions, emitted due to various activities.

In this we compute the emissions of Carbon-Di-Oxide, by taking into account the usage of the Electrical Energy.

Basis for computation of CO₂ Emissions:

- **1 kWh** of Electrical Energy releases **0.9 Kg of CO₂** into atmosphere

Based on the above Data we compute the CO₂ emissions which are being released in to the atmosphere by the College due to its Day to Day operations

Table No5: Month wise CO₂ Emissions:

No	Month	Energy Consumed, kWh	CO2 Emissions, MT
1	Apr-21	1577	1.52
2	May-21	700	0.73
3	Jun-21	463	0.52
4	Jul-21	456	0.52
5	Aug-21	477	0.54
6	Sep-21	652	0.70
7	Oct-21	671	0.71
8	Nov-21	1072	1.08
9	Dec-21	1121	1.12
10	Jan-22	1402	1.36
11	Feb-22	1036	1.03
12	Mar-22	981	0.99
13	Total	10608	10.83
14	Maximum	1577	1.52
15	Minimum	456	0.52
16	Average	884	0.90

Chart No 3: Month wise CO₂ Emissions:

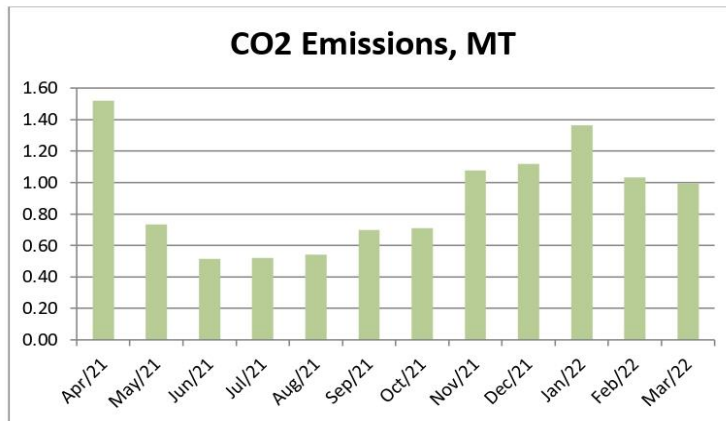


Table No 6: Important Parameters:

No	Parameter/ Variation	Energy Purchased, kWh	CO2 Emissions, MT
1	Total	10608	10.83
2	Maximum	1577	1.52
3	Minimum	456	0.52
4	Average	884	0.90

CHAPTER V
STUDY OF USAGE OF ALTERNATE ENERGY

As on today College has not install solar roof-top PV plant, It is recommended to install solar roof-top PV plant on the college building.

CHAPTER VI STUDY OF USAGE OF LED LIGHTING

In this chapter, we compute the percentage of usage of LED Lighting to Annual Lighting power requirement.

Table No 8: Percentage of Usage of LED Lighting to Annual Lighting Load:

No	Particulars	Value	Unit
1	No of 40 W FTL Fittings	206	Nos
2	Demand of 40 W FTL Fitting	40	W/Unit
3	Total Electrical Load of 40 W FTL Fittings	8.24	kW
4	No of 20 W LED Tube Lights	19	Nos
5	Demand of 20 W LED Tube Light	20	W/Unit
6	Total Electrical Load of 20 W LED Fittings	0.38	kW
7	Annual Total Lighting Load = 3+6	8.62	kWh
8	Annual LED Lighting Load = 6	0.38	kWh
9	Annual Lighting Requirement met by LED= $8 \times 100 / 7$	4.41	%



Regd. No. MH/4775/Satara

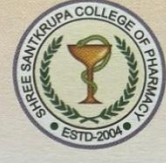
DTE Code : 6394, MSBTE Code : 2144



Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon (Shivajinagar), Tal: Karad, Dist: Satara, (Maharashtra State) Pin-415111
Ph : (02164) 257374 | Email : principalsntk@rediffmail.com | Web : www.sscop.org



Energy Audit Report

2020-21

ENERGY AUDIT REPORT OF SHREE SANTKRUPA COLLEGE OF PHARMACY, Ghogaon (Shivajinagar)





Year: 2020-21

Prepared by:

Enrich Consultants

Yashashree, 26, Nirmal Bag Society,
Near Muktangan English School, Parvati, Pune 411009
Phone: 09890444795 Email: enrichcons@gmail.com

MAHARASHTRA ENERGY DEVELOPMENT AGENCY <small>An ISO 9001 : 2000 Reg. no. : RQ 91 / 2482</small>	
	Maharashtra Energy Development Agency (Government of Maharashtra Institution) Aundh Road, Opposite Spicer College Road, Near Commissionerate of Animal Husbandary, Aundh, Pune, Maharashtra 411067 Ph No: 020-35000450 Email: eee@mahaurja.com , Web: www.mahaurja.com
ECN/2021-22/CR-14/1577	22 nd April, 2021
CERTIFICATE OF REGISTRATION FOR CLASS 'A'	
We hereby certify that, the firm having following particulars is registered with MAHARASHTRA ENERGY DEVELOPMENT AGENCY (MEDA) under given category as "Energy Planner & Energy Auditor" in Maharashtra for Energy Conservation Programme of MEDA.	
Name and Address of the firm	: M/s Enrich Consultants Yashashree, Plot No. 26, Nirmal Bag Society, Near Muktangan English School, Parvati, Pune - 411009.
Registration Category	: <i>Empanelled Consultant for Energy Conservation Programme for Class 'A'</i>
Registration Number	: MEDA/ECN/2021-22/Class A/EA-03
<ul style="list-style-type: none">• Energy Conservation Programme intends to identify areas where wasteful use of energy occurs and to evaluate the scope for Energy Conservation and take concrete steps to achieve the evaluated energy savings.• MEDA reserves the right to visit at any time without giving prior information to verify quarterly activities performed by the firm and canceling the registration, if the information is found incorrect.• This empanelment is valid till 21st April, 2023 from the date of registration, to carry out energy audits under the Energy Conservation Programme• The Director General, MEDA reserves the right to cancel the registration at any time without assigning any reasons thereof.	
 General Manager (EC)	

Enrich Consultants

Yashashree, 26, Nirmal Bag Society,
Near Muktang English School, Parvati, Pune 411 009
Tel: 09890444795 Email: enrichcons@gmail.com

Ref: EC/SCP/20-21/01

Date: 26/05/2021

CERTIFICATE

This is to certify that we have conducted Energy Audit at Shree Santkrupa College of Pharmacy, Ghogaon in the Academic year 2020-21.

The College has adopted following Energy Efficient practices:

- Maximum usage of Day Lighting
- Usage of Energy Efficient LED Light Fitting

We appreciate the support of Management, involvement of faculty members and students in the process of making the Campus Energy Efficient.

For Enrich Consultants,



A Y Mehendale,
Certified Energy Auditor
EA-8192

INDEX

Sr. No	Particulars	Page No
I	Acknowledgement	5
II	Executive Summary	6
III	Abbreviations	7
1	Introduction	8
2	Study of Connected Load	9
3	Study of Present Energy Consumption	11
4	Carbon Foot Printing	13
5	Study of Usage of Alternate Energy	14
6	Study of LED Lighting	15

ACKNOWLEDGEMENT

We Enrich Consultants, Pune, express our sincere gratitude to the management of Shree Santkrupa College of Pharmacy, Ghogaon for awarding us the assignment of Energy Audit of their Campus for the Academic Year: 20-21.

We are thankful to all the Principal and Staff members for helping us during the field study.

EXECUTIVE SUMMARY

1. **Shree Santkrupa College of Pharmacy, Ghogaon** consumes Energy in the form of **Electrical Energy** used for various Electrical Equipment, Office & other facilities.

2. Present Energy Consumption & CO₂ Emission:

No	Parameter/ Value	Energy Purchased, kWh	CO ₂ Emissions, MT
1	Total	7132	6.418
2	Maximum	1239	1.115
3	Minimum	377	0.339
4	Average	594.33	0.534

3. Energy Conservation projects already installed:

- Maximum Usage of Day Lighting
- Usage of Energy Efficient LED fittings

4. Usage of Alternate Energy:

- As on today College has not installed solar rooftop power plant. It is recommended to install solar power rooftop system on the college building as per availability of funds.

5. Usage of LED Lighting:

- The Total Lighting load of College is **8.62 kW**.
- The LED Lighting Load is **0.38 kW**.
- The % of LED Lighting to Total Lighting Load is **4.41 %**.

6. Assumptions:

1. **1 kWh** of Electrical Energy releases **0.9 Kg** of CO₂ into atmosphere
2. **100 LPD** Solar Thermal System saves **1500 kWh** of Electrical Energy per Annum.
3. Daily working hours-**4 Nos** (For Lighting Calculations)
4. Annual working Days-**120 Nos** (For Lighting Calculations)

7. References:

- For CO₂ Emissions: www.tatapower.com

ABBREVIATIONS

LED	:	Light Emitting Diode
MSEDCL	:	Maharashtra State Electricity Distribution Company Limited
IQAC	:	Internal Quality Assurance Cell
BEE	:	Bureau of Energy Efficiency
FTL	:	Fluorescent Tube Light
Kg	:	Kilo Gram
kWh	:	kilo-Watt Hour
CO ₂	:	Carbon Di Oxide
MT	:	Metric Ton

CHAPTER-I INTRODUCTION

1.1 Objectives:

1. To study present Energy Consumption
2. To Study the present CO₂ Emissions
3. To study usage of Alternate Energy
4. To study usage of LED Lighting

1.2 Table No 1: General Details of the College:

No	Head	Particulars
1	Name of Institution	Shree Santkrupa College of Pharmacy, Ghogaon
2	Address	Ghogaon (Shivajinagar) Dist. Satara (M.H.) – 415 111
3	Affiliation	Shivaji University, Kolhapur

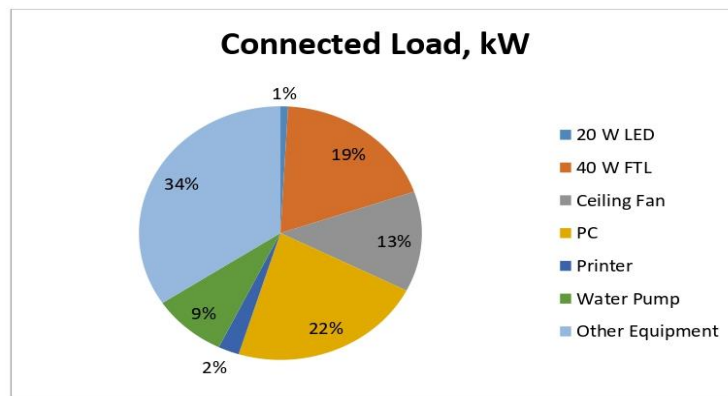
CHAPTER-II STUDY OF CONNECTED LOAD

The major contributors to the connected load of the College include:

Table No 2: Study of Equipment wise Connected Load:

No	Equipment	Qty	Load, W/Unit	Load, kW
1	20 W LED	19	20	0.38
2	40 W FTL	206	40	8.24
3	Ceiling Fan	86	65	5.59
4	PC	65	150	9.75
5	Printer	7	150	1.05
6	Water Pump	1	3730	3.73
7	Other Equipment	100	150	15
8	Total			44

Chart No 1: Study of Connected Load:



CHAPTER-III

STUDY OF PRESENT ENERGY CONSUMPTION

In this chapter, we present the analysis of Electrical Energy Consumption.

Table No 3: Electrical Bill Analysis- 2020-21:

No	Month	Energy Purchased, kWh
1	Apr-20	1239
2	May-20	377
3	Jun-20	424
4	Jul-20	460
5	Aug-20	474
6	Sep-20	576
7	Oct-20	480
8	Nov-20	478
9	Dec-20	457
10	Jan-21	642
11	Feb-21	716
12	Mar-21	809
13	Total	7132
14	Maximum	1239
15	Minimum	377
16	Average	594.33

Chart No 2: Variation in Monthly Energy Consumption:

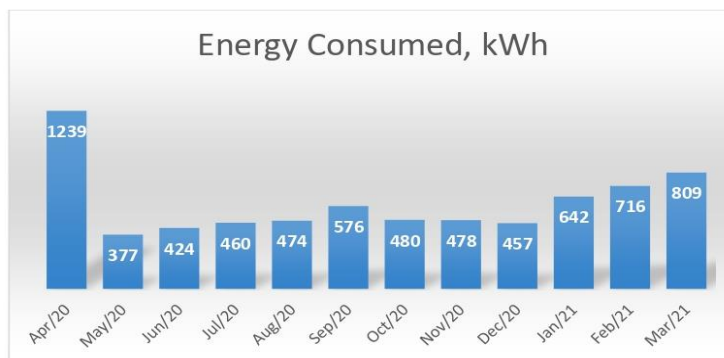


Table No4: Variation in Important Parameters:

No	Parameter/ Variation	Energy Purchased, kWh
1	Total	7132
2	Maximum	1239
3	Minimum	377
4	Average	594.33

CHAPTER-IV CARBON FOOTPRINTING

A Carbon Foot print is defined as the Total Greenhouse Gas emissions, emitted due to various activities.

In this we compute the emissions of Carbon-Di-Oxide, by taking into account the usage of the Electrical Energy.

Basis for computation of CO₂ Emissions:

- 1 kWh of Electrical Energy releases 0.9 Kg of CO₂ into atmosphere

Based on the above Data we compute the CO₂ emissions which are being released in to the atmosphere by the College due to its Day to Day operations

Table No5: Month wise CO₂ Emissions:

No	Month	Energy Purchased, kWh	CO ₂ Emissions, MT
1	Apr-20	1239	1.115
2	May-20	377	0.339
3	Jun-20	424	0.381
4	Jul-20	460	0.414
5	Aug-20	474	0.426
6	Sep-20	576	0.518
7	Oct-20	480	0.432
8	Nov-20	478	0.430
9	Dec-20	457	0.411
10	Jan-21	642	0.577
11	Feb-21	716	0.644
12	Mar-21	809	0.728
13	Total	7132	6.418
14	Maximum	1239	1.115
15	Minimum	377	0.339
16	Average	594.333	0.534

Chart No 3: Month wise CO₂Emissions:

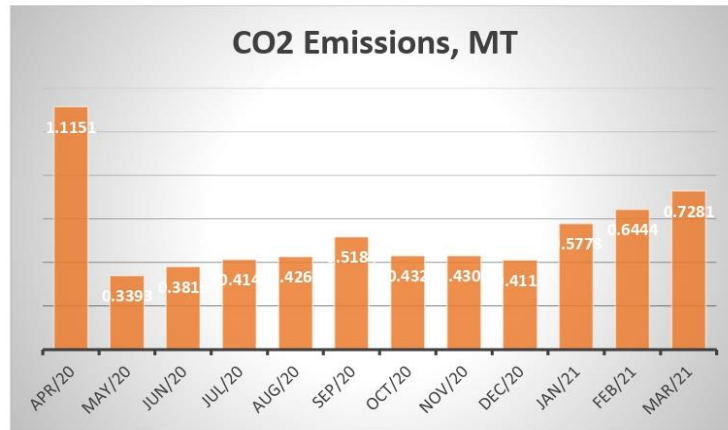


Table No 6: Important Parameters:

No	Parameter/ Variation	Energy Purchased, kWh	CO2 Emissions, MT
1	Total	7132	6.418
2	Maximum	1239	1.115
3	Minimum	377	0.339
4	Average	594.333	0.534

CHAPTER V
STUDY OF USAGE OF ALTERNATE ENERGY

As on today College has not install solar roof-top PV plant, Solar thermal water heating plant; the percentages of uses of alternate energy to the annual energy demand work to be zero percent.

CHAPTER VI STUDY OF USAGE OF LED LIGHTING

In this chapter, we compute the percentage of usage of LED Lighting to Annual Lighting power requirement.

Table No 8: Percentage of Usage of LED Lighting to Annual Lighting Load:

No	Particulars	Value	Unit
1	No of 40 W FTL Fittings	206	Nos
2	Demand of 40 W FTL Fitting	40	W/Unit
3	Total Electrical Load of 40 W FTL Fittings	8.24	kW
4	No of 20 W LED Tube Lights	19	Nos
5	Demand of 20 W LED Tube Light	20	W/Unit
6	Total Electrical Load of 20 W LED Fittings	0.38	kW
7	Annual Total Lighting Load = 3+6	8.62	kWh
8	Annual LED Lighting Load = 6	0.38	kWh
9	Annual Lighting Requirement met by LED= $8 \times 100 / 7$	4.41	%

